ENGINEERING NEWS-RECORD

Generator foundations go in at Watts Bar Dam as part of TVA's hydro power expansion

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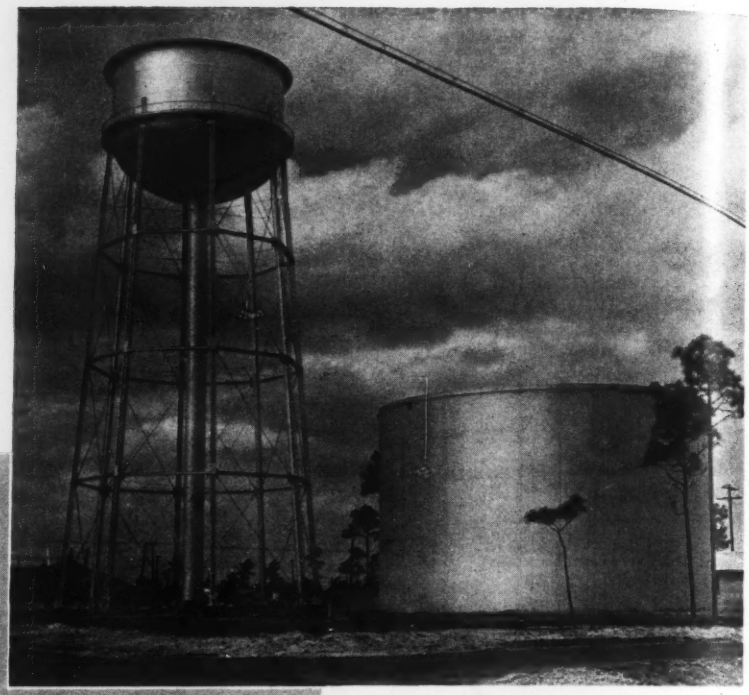
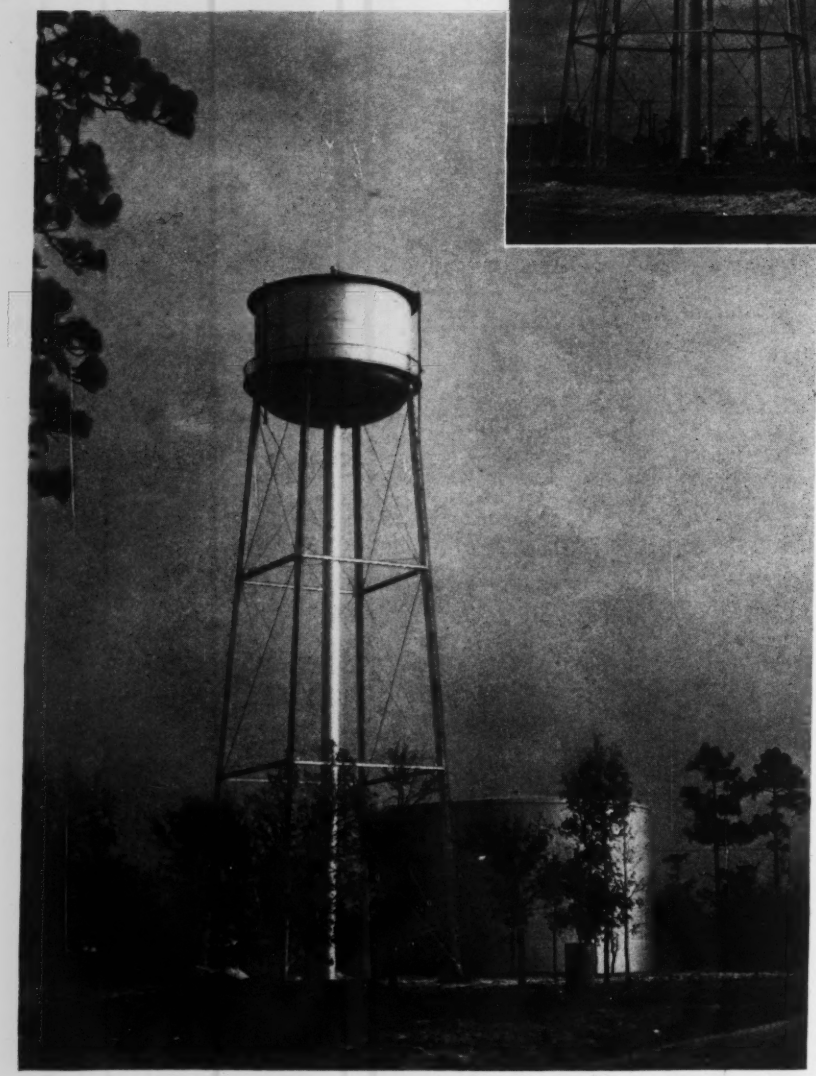
STEEL TANKS for Water Supply....





These views show typical installations of elevated tanks and flat-bottom steel reservoirs used to provide water for general service and fire protection for industrial plants, municipalities and training camps. Above: 500,000-gal. ellipsoidal-bottom tank and 1,000,000-gal. steel reservoir. Left: 100,000-gal. ellipsoidal-bottom tank and 1,000,000-gal. steel reservoir.

PROVIDING a water supply for an industrial plant or a military camp is similar to building a water works system to serve a city. Steel reservoirs are utilized to provide adequate ground level reserves and elevated tanks are installed to deliver dependable gravity pressure in the mains.

Furthermore, the same general principles of distribution govern. The capacity of the elevated storage should be adequate to meet peak demands. The height to bottom should be sufficient to deliver the desired pressure. The tank itself should be located as near as possible to the center of demand.

Elevated steel tanks are built in standard capacities of 5,000 gallons to 2,000,000 gallons and flat-bottom reservoirs from 25,000 gallons up.

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Plants in Birmingham, Chicago and Greenville, Pa. In Canada—Horton Steel Works Limited, Fort Erie, Ont.

Compilation of projects for post-war works started

WPA funds to be used by a new organization—Public Works Reserve—to develop a list and prepare estimates; a broader plan is before Congress

In the most concrete move yet made towards the creation of a reservoir of public works projects to be carried out after the war, the Federal Works Agency has set up an organization, the Public Works Reserve, to work with state and local agencies in the formulation of public works programs. The ultimate objective is to have available billions of dollars worth of local public works, all designed and ready to build, which could get under way quickly as part of some future PWA-type federal-aid works program.

Technically, the Public Works Reserve is a WPA project sponsored by the Federal Works Agency. However, only clerical and auxiliary work will be handled by WPA relief workers. Presidential approval has been obtained for a waiver of the usual WPA restrictions, and the project will be handled by planners and engineers especially hired for the Public Works Reserve. One of the biggest worries so far, in fact, is whether it will be possible to find competent men to do the work.

Initially, about $2,500,000 is available for the PWR, but more may be provided as the scope of the work expands.

Broader plan pending

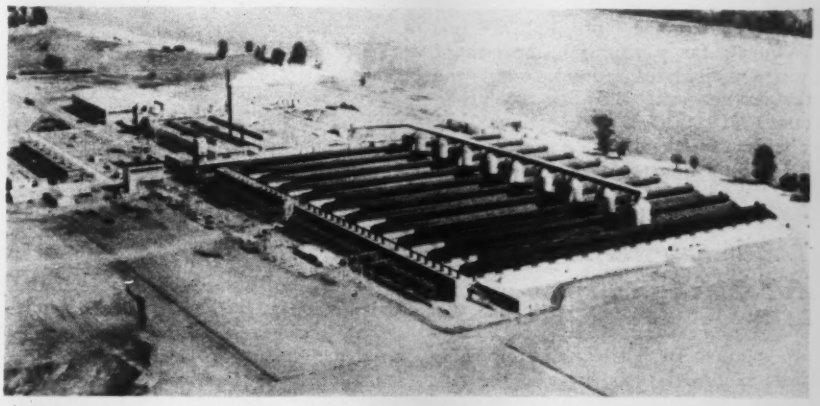
These project-planning activities will be considerably broadened if Congress acts favorably on an administration-sponsored bill introduced by Senator Wagner this month. Wagner's bill would authorize the President to loan money for advance preparation of plans to federal, state, and local agencies "through the Federal Works Agency." Advances would be repayable when the projects are undertaken. No amount is specified in the bill, but the administration is thinking in terms of about $50,000,000.

If the Wagner bill goes through, the present Public Works Reserve would probably become the nucleus of a much larger organization. Meanwhile, however, PWR is going ahead without relation to the pending legislation. At its head, as coordinator, is Jacob Crane, planning consultant in the Federal Works Agency. Directing the project, inside the WPA, is E. C. Smith, Jr. Frank Herring represents the National Resources Planning Board. Four field representatives of PWR have been appointed, and it is planned to name a representative, preferably an engineer, in each state. These state representatives will build up staffs as their work develops.

First job of the state representatives will be to get in touch with the governmental units in their territory. These will be asked to prepare programs of needed public works, more or less on a six-year basis, to be submitted to the PWR. The PWR has no funds available to grant to local agencies to finance this work, but it is prepared to loan technical personnel, or, if the agency feels it needs a particular man, PWR might hire and loan him to the agency.

This work would result in lists of projects, described and justified in a general way, with rough estimates of cost, time to build, labor requirements, and the like. A significant difference from previous works programming is that even at this stage estimates are to be made, as an aid in judging the project, of its maintenance cost and the sources from which maintenance money might come.

The next step—one which could be initiated immediately in those communities that already have an advance public-works plan—is the preparation of detailed designs for selected projects. Here the chief responsibility lies with the localities. PWR again cannot make grants, and there is no intention, officials say, of performing a consulting engineer



Expanding aluminum production with Bonneville power

A fifth unit has been added to the plant of the Aluminum Co. at Vancouver, Wash., only 15 months after the start of work at the site, bringing the capacity up to 150,000,000 lb. per year and accounting for a 162,500 kw. contract for Bonneville power. Construction of the first unit of the plant, which went into production last September, was reviewed in ENR Nov. 7, 1940. Other units were added as rapidly as possible (December, March and April) and today the plant capacity is larger than the entire national output during the last war, but only 20 per cent of the aluminum to be produced by the company in 1942. This plant, now employing about 800, is considered the beginning of a large industrial expansion in the field of light metals, centering in the Pacific Northwest and utilizing the power from the Columbia River development.

function. PWR will, however, loan men to help local engineering staffs do the work, and if the community wants to retain a consultant, PWR would give such help as, say, the furnishing of a survey party.

Coordination of these non-federal public works with federal activities is being maintained through National Resources Planning Board and a special committee of representatives of all federal construction agencies.

Local representatives of the Public Work Reserve that have been named to date are Alfred Roche, 465 West 14th St., New York; Robert Mead, 681 Market St., San Francisco; J. Banks Hudson, 907 Canal Bank Bldg., New Orleans; Charles Miner, 222 West North Bank Drive, Chicago.

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More defense road money in House sponsored bill

A new defense road bill authorizing slightly higher amounts than the bill passed by the Senate earlier this month has been drafted by the House Committee on Roads. On nearly all points the committee bill follows the Senate measure. The Senate, however, set a limit of $250,000,000 on the amounts that might be appropriated for defense roads, without specifying any breakdown among the various categories of defense work. The House bill would permit appropriation of a total of $260,000,000 plus whatever amounts are necessary for repair of roads damaged by military movements. It divides this sum up as follows: for improvements to the strategic network, to be matched by the states on a 1 to 3 basis, $100,000,000; for federal construction of access roads, $150,000,000; for federal construction of flight strips, $2,000,000; for paying half the cost of advance planning of improvements to the strategic network, including its urban sections, $10,000,000. This measure will probably pass the House and be reconciled with the Senate bill in conference.

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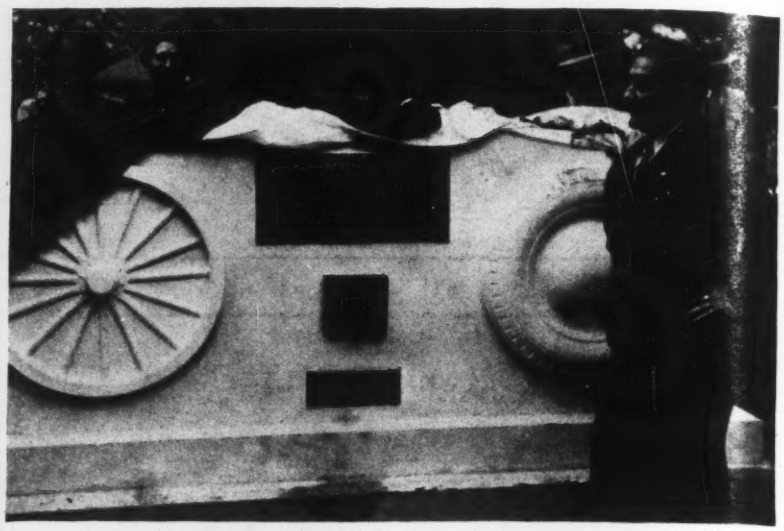
Labor negotiator named for Chicago employees

Mayor Edward J. Kelly of Chicago has appointed Dr. Earl Dean Howard to handle labor relations between the city and its employees. He will pay particular attention to wage agreements and working conditions. Dr. Howard, economist and recognized authority on industrial relations, was in charge of labor relations for Hart, Schaffner & Marx for 21 years. The new post was created as the result of a survey of municipal departments by the Chicago Association of Commerce and the Civic Federation.



First concrete paving laid 50 years ago

Commemorating the 50th anniversary of the laying of the first concrete paving in the United States, highway engineers and constructors mingled in the crowd which gathered in Bellefontaine, Ohio, on June 13 for a ceremony carried out under the sponsorship of the Junior Chamber of Commerce. The occasion was marked by the unveiling of a monument which bears the inscription, "This is the first portland cement concrete street built in the United States. Constructed in 1891. Here started the better roads movement which has given our citizens from coast to coast swift and sure transportation."

The principal speaker on the occasion was Governor John W. Bricker, who paid tribute to those responsible for the building of this first concrete paving and emphasized the importance of highway improvement in the development of the country.

History related during the program brought forth the information that George W. Bartholomew, pioneer cement manufacturer, due to his enthusiasm and persistence about the possibility of paving streets with concrete, received a delegation from the city council of Bellefontaine who authorized him to pave the four streets surrounding the public square. However, as an indication that the city was rather skeptical as to the result of the pavement, it was suggested that Mr. Bartholomew post a $5,000 bond guaranteeing that the street would last for a period of at least five years. Despite local criticism the paving was placed and Mr. Bartholomew lived to see it used for nearly half a century.

WPA access road program costing $17,000,000

Access roads leading to naval, military and defense industry sites valued at $17,000,000 are now under construction by WPA. An operating force of about 15,000, many of them engaged on round-the-clock schedules, is pushing the road program to completion as fast as possible, according to Howard O. Hunter, WPA Commissioner.

The 120 access road projects under construction on May 1 were distributed among 32 states, Puerto Rica and Hawaii. The largest state program was in Texas where there were 17 projects with a total value of $3,393,546. California had 13 projects costing $2,233,909; Florida, 10 projects costing $2,257,397; and Massachusetts, 8 projects costing $943,051. Total expenditures under the program on May 1, totaled $2,675,835 while projects to the value of $248,997 had been completed.

In addition to the $17,000,000 program, there were more than $3,100,000 worth of projects which had been approved, but not placed in operation. Projects within naval and military reservations and those in the strategic highway system are not included.

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Arizona's road budget set at $10,929,950

Arizona's road budget for 1941-42 has been fixed by the highway commission at $10,929,950, including an anticipated $1,435,382 federal appropriation for military roads. This budget exceeds by nearly $2,000,000 the budget for 1940-41.

The budget listed the principal sources of revenue as follows: fuel tax, $3,762,000; registration fees, $1,038,000; federal funds allotted to uncompleted projects, $1,240,000; federal funds allotted to new projects, $2,134,000; common carrier taxes, $190,000; and title fees, $115,000.

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Western highway officials vigorously oppose road fund diversion

State highway officials ask that road taxes be spent for highways only and that no change be made in present federal road-aid set-up nor in the present system for spending federal funds

Return of all road-use taxes levied by the federal government to the states for expenditure on the federal-aid system was asked of Congress by the Western Association of State Highway Officials at the 20th annual meeting of the society held in Casper, Wyo., June 18-20. The association also urged that there be no further increase in federal road-use taxes unless the funds so obtained be spent on highways. In a broadly worded resolution that was evidently directed at extension of WPA roadbuilding activities, the association went on record as "vigorously opposed" to any change in the present system of allocating funds to the states for the federal-aid highway system and urged "that any and all federal funds in the future should be expended through the state highway departments and the Public Roads Administration and no other federal agencies."

Military highways

In opening the convention, Burton G. Dwyre, state highway engineer of New Mexico, president, said that the highway departments of the twelve western states that make up the association can only be classified as orphan children insofar as military highways are concerned. Because of the great mileage involved and the large amount of public land in western states, he said if a real job is to be done there must be a higher percentage of federal participation than at present. The same need was recorded in the report of the association's committee on defense roads, headed by Robert Lee Bobbitt. This report was presented by Calvin H. Speedy of the Texas Highway Department. It expressed concern over failure of the Administration to ask Congress for the $287,000,000 that Commissioner Thos. H. MacDonald says is needed for defense road work and for access roads to camps.

Roads in England

A feature of the meeting was a talk by Lt. Col. Lacey V. Murrow of the Washington highway department, now on active duty, recently returned from England where he was sent by the government to study the military road situation (*ENR* June 19, p. 944). Col. Murrow urged close cooperation between the military authorities and the state and federal highway building agencies in planning highway to meet the nation's military needs. He also stressed the importance of a central agency to control all forms of transportation when used for defense.

H. G. Sours, president, American Road Builders Assn., in a paper on "Our Defense Highway Problem, Immediate and Future," turned attention to the post-war period and cited roadbuilding as one of the best means for taking up the slack in employment. As to current needs, Mr. Sours said he was opposed to using the war as an excuse for building an elaborate system of highways. He noted, however, that most roads that are needed for defense purposes also are needed for peacetime service, hence money spent on them has a long time value. An immediate need, he said, in addition to access roads, is ample money to maintain roads now being rapidly worn out by the increase in traffic to defense industries.

New head of W.A.S.H.O.

C. F. Seifried, chief engineer of the Wyoming Highway Department, was elected president of the Western Association of State Highway Officials at the association's 20th annual convention in Casper, Wyo., June 20.

The importance of fast and skillful road construction in the current emergency was stressed by M. W. Watson, president of the Associated General Contractors of America.

Several papers at the meeting related to technical problems of highway engineers. These included the durability of concrete as affected by the chemical reaction between cement and aggregate; problems raised by the size and weight of motor vehicles engaged in interstate commerce; the part of highway engineers in getting safer highways; highway taxes and planning; right-of-way problems over public lands; limited-access highways; and practical application of soil mechanics to highway building.

The 20th annual meeting was made the occasion for presenting honorary membership to the eleven living past presidents of the association.

C. F. Seifried, chief engineer, Wyoming Highway Department, was elected president to succeed Burton G. Dwyre, Robert Lee Bobbitt, was elected vice president and John E. Furlong, manager, highway planning survey, Colorado Department of Highways, was named secretary-treasurer.

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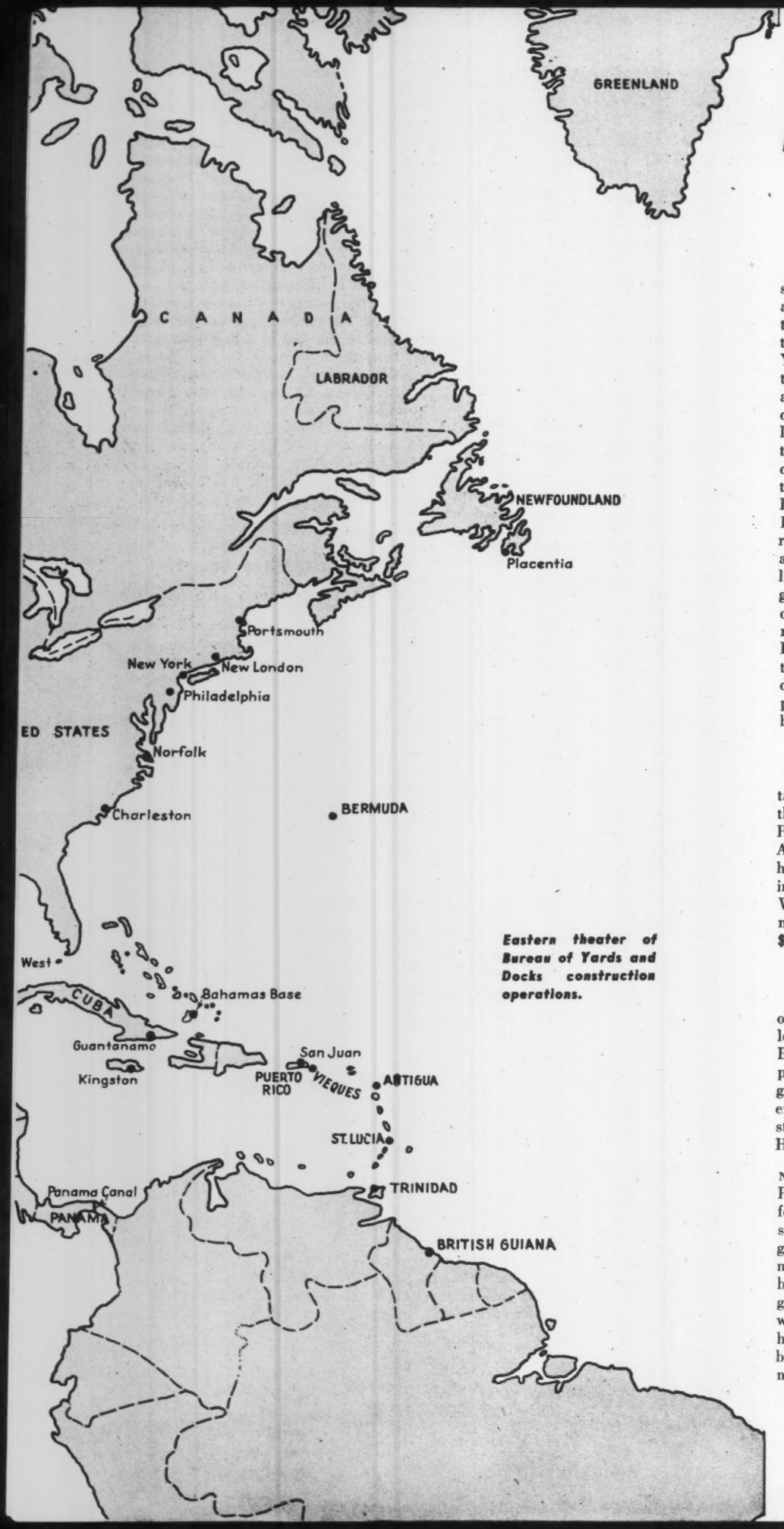
Water delivery started from Colorado Aqueduct

Delivery of Colorado River water, softened and filtered, to nine southern California cities June 18, marked the completion of the giant 392-mi. Colorado River Aqueduct system of the Metropolitan Water District of Southern California. With the beginning of this test operation, 18 years of engineering studies and plans and eight and one-half years of actual construction work was virtually brought to a close.

First engineering studies on the Colorado River Aqueduct were initiated by the city of Los Angeles in 1923. Later, in 1928, the Metropolitan Water District, including Los Angeles and 12 other cities, was organized and took over the project. Actual construction work on the giant water supply system was started in December, 1932, and has been under way continuously ever since. The aqueduct was financed by a $220,000,000 bond issue authorized by the citizens of 13 southern California cities, and according to F. E. Weymouth, general manager and chief engineer of the district, the work contemplated in the bond issue estimate is being actually completed at a cost of $23,000,000 less than the original bond estimates.

Water will be delivered to the Metropolitan Water District cities, including ten of the thirteen city members of the District, until Aug. 18, without charge. This service is being donated without cost during the two-month period while test operations on the system are being made. After Aug. 18 water will be sold at the rate of $15 per acre-ft., a rate equivalent to 3½¢ per 100 cu.ft. The average retail rate for domestic water in the various district cities is about 14¢ per 100 cu.ft.



Eastern theater of Bureau of Yards and Docks construction operations.

Bureau of Yar

During the past twelve months congressional appropriations applicable to naval airbases and fleet shore facilities have totaled just over one billion dollars. And in this same period the Navy's Bureau of Yards and Docks has let construction contracts covering three-quarters of that amount, of which 50 percent represents completed work. Averaging over 60 million dollars a month, the bureau let contracts at a rate 2½ times that of the preceding twelve months and over 3 times the previous record chalked up in 1918. Responsible for this grueling pace were Rear Adm. Ben Moreell, chief of the Bureau, and Commander Lewis B. Combs, assistant chief, assisted by the other public works officers of the Navy's Civil Engineer Corps in Washington and those out on the jobs. In commenting on the bureau's achievements, Secretary of Navy Knox outlined in more complete form than has yet been available just what the construction program is and how it is progressing. The data on these pages are based on the Bureau's report.

Appropriation and expenditures

Defense construction for the shore establishment of the Navy began, except for the 1939 work in Alaska, Hawaii and Puerto Rico, with passage of the Naval Appropriation Act of June 11, 1940. What has happened since that time is detailed in the accompanying charts and tables. What will happen in the next twelve months is the expenditure of another $600,000,000.

Atlantic bases

Development of advanced naval bases on Atlantic and Caribbean island sites leased from Britain or purchased from British owners has been an important part of the more recent construction program. Work is in progress at all locations except in the Bahamas, where further study of the proposed site is underway. Here is the record.

NEWFOUNDLAND—Site at Argentia, on Placentia Bay, is a splendid body of water for seaplane operation, bordered by slowly rising land roughly leveled by glacial action, but a bleak location with much damp weather and fog. Contractors began work January, 1941, on clearing, grading and wharf building, and now with 2,500 men are building barracks, hangars, shops and runways. Completion before winter of the $17,050,000 development is expected.

...nd Docks reports on Navy construction

BERMUDA—Site opposite Hamilton, including two islands and adjacent bays in the Great Sound, is to be developed by dredging and filling between the islands and between the islands and the shore. Work has begun on construction of aviation facilities and naval vessel anchorage. Cost will be $11,250,000.

PUERTO RICO—Large naval airbase is almost complete in San Juan Harbor. Fleet base work will shortly be undertaken at Vieques, an island east of Puerto Rico. Breakwaters, dredging, a large graving dock and other facilities will cost $42,500,000.

ANTIGUA AND ST. LUCIA—Work is underway on seaplane operating stations on these two small British islands. Cost is estimated at $2,920,000 and $1,625,000, respectively.

JAMAICA—Site is on south shore 20 mi. west of Kingston. Facilities are for seaplane operation and vessel anchorage. Expenditure of $2,750,000 is planned.

TRINIDAD—Site on Gulf of Para, at the foot of hills, is well removed from the low-lying areas in the vicinity of Port of Spain. Seaplane base, fleet anchorage and berthing facilities, and limited amount of repair facilities and housing, are planned at a cost of $17,855,000.

BRITISH GUINEA—Site is on Essequibo River, and a seaplane base is to be constructed at cost of $1,800,000.

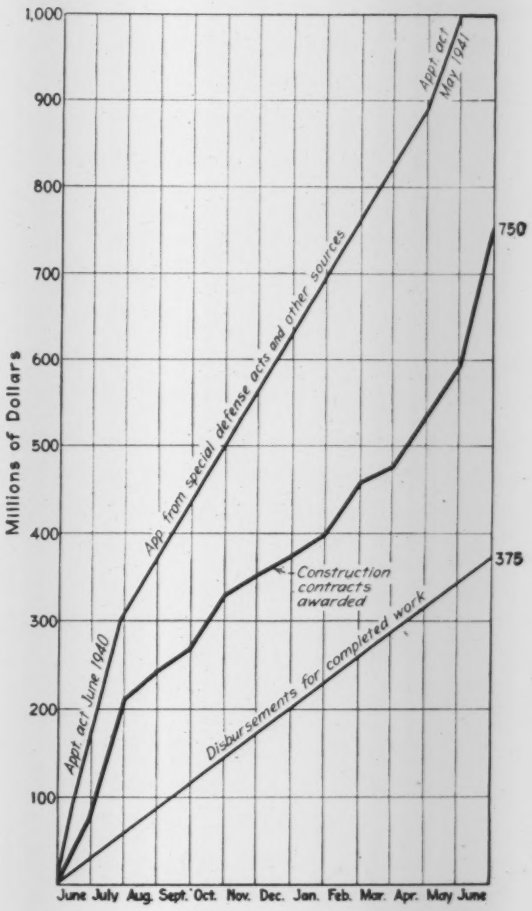
In addition the Navy has selected a tentative site for a small air station on an island of the Bahama group located in a commanding position with relation to the Windward Passage between Cuba and Haiti. A $2,550,000 seaplane base will be built. And finally the Guantanamo naval station of the south shore of Cuba east of Santiago has been greatly expanded, both for the smaller vessels of the fleet and for aviation activities.

Temporary construction

Construction on all of these bases is required to be of a temporary nature under the wording of the appropriation act, although certain types of structure must of necessity be of steel and concrete to fulfill their functions. Prior to approval of the leases many demountable steel buildings of light construction had been purchased, and are now being erected on these sites with a saving of valuable time.

Repair facilities and fleet bases

The other major part of the Bureau's construction program involves shore facilities for ship repair. Two shipbuilding docks of the largest size are under construction at New York, one at Norfolk, Va., and two at Philadelphia. A new drydock is under construction at Bayonne, N. J., for maximum size ships, and one each at Vieques, P. R., Long Beach, Calif., and Pearl Harbor, T. H. Smaller drydocks are also being provided at Portsmouth, N. H., Charleston, S. C. and Mare Island, Calif., and these are being supplemented by marine railways at New London, Conn., Philadelphia and Key West, Fla. Shop facilities, additional storage, power plant enlargements, etc., necessary to permit full use of these shipbuilding and ship repair drydocks, are also being provided.



How the Bureau of Yards and Docks put $750,000,000 under contract and paid out $375,000,000 for completed work in twelve months.

HOW CONSTRUCTION MONEY WAS PROVIDED AND FOR WHAT IT IS BEING SPENT

APPROPRIATIONS	
Appropriation Act (June 11, 1940)	$ 97,640,362
1st Defense Act (June 26, 1940)	202,654,000
2nd Defense Act (Sept. 9, 1940)	87,825,000
3rd Defense Act (Oct. 8, 1940)	18,000,000
4th Defense Act (Mar. 17, 1941)	189,162,500
5th Defense Act (Apr. 5, 1941)	17,075,000
National Defense Housing	61,977,500
Atlantic Bases (President's Emergency Fund)	52,000,000
Replacement of Naval vessels	134,341,000
Naval Emergency Fund	9,000,000
Transfer from Army	8,761,000
Appropriation Act (May 7, 1941)	132,293,194
	$1,010,729,556

ALLOCATIONS	
Shipbuilding and repair facilities	$ 312,907,500
Fleet facilities	124,108,000
Aeronautic facilities	279,937,000
Storage facilities	54,900,000
Marine Corps activities	43,566,000
Ordnance activities	38,817 000
Naval personnel structures	24,259,000
Defense housing	71,312,000
Hospital facilities	9,552,000
Radio activities	4,052,000
Naval Research Laboratory	559,000
Other Service Structures	37,999,056
War Department	8,761,000
	$1,010,729,556

MEN AND JOBS

THEODORE F. JOHNSON, since 1933 professor of sanitary engineering at North Carolina State College, Raleigh, and engineer for the North Carolina State Department of Conservation and Development since 1935, has just been appointed full-time secretary and coordinator of the North Carolina State Defense Council. He will coordinate all the defense projects in the state, including the maneuvers to be staged in the state next fall by the U. S. Army. Professor Johnson graduated from Denison University in 1908. In 1913 he obtained the degree of C.E. from Ohio State University and completed work for master's degree in science at Denison University. His wide experience includes serving on the faculties of Denison and Cornell universities; nine years as partner with William C. Olsen, Inc., consulting engineers, of Raleigh; and president North Carolina Council of Housing Authorities. Since June, 1936 he has been consultant to National Resources Committee and National Resources Planning Board and to N. C. State Planning Board.

T. F. JOHNSON

F. L. BUCK, who spent a number of years with the United Fruit Co. in Guatemala and with Firestone Plantation Co. in Liberia, West Africa, is now employed as civil engineer with the Texas Co. (Venezuela), Ltd., in Caracas, Venezuela.

JOHN M. RICHARDS of Nashville, Tenn., has been appointed resident engineer on the Bluff Creek reservoir at Oklahoma City, for V. V. Long & Co., consulting and designing engineers, for whom Mr. Richards has been previously in charge of a branch office in Nashville.

DEWEY WELSH, Jefferson City, Mo., engineer for the Missouri state highway commission, has resigned to become city engineer at Columbia, Mo.

CODIE D. WELLS, engineer with the Texas state highway department for 20 years, has resigned his position to become a partner in the San Antonio firm of Beavers & Lodal, consulting engineers. The firm is now Beavers, Lodal and Wells.

BURL H. BUSH, dean of engineering, Fenn College, Cleveland, Ohio, June 30 will go into active service as a lieutenant in the U. S. Navy, to be stationed at Charleston, S. C. Lt. Bush graduated from the U. S. Naval Academy in 1929 and obtained a master of science degree in mechanical engineering at Iowa State in 1931.

Six U. S. Army Engineer employees in Kentucky received orders June 11 to report in Washington to join others en route for Bermuda, where they will work on the new United States air and naval base. They are: RAYMOND M. KALKBRENNER, HOWARD D. BEGLEY, JAMES E. RICE, LORAN M. STILES, WILLIAM G. LOCKWOOD and ROBERT A. DEEM.

R. D. MCDONALD, of Redfield, S. D., formerly an engineer with the Public Roads Administration, has accepted a position designing airport layouts in Kansas City.

WILLIAM H. ROSE of Bradenton, Fla., and Washington, D. C., who retired from the army in 1919 with the rank of brigadier-general to become a consulting engineer, has been appointed to take charge of construction of four aircraft assembly plants. The plants are located at Fort Worth, Tex., Tulsa, Okla., Omaha, Neb., and Kansas City, Kan. Before the World War, Gen. Rose spent 5½ years in charge of electrical design, construction, operation and maintenance of the Panama Canal. During the World War his command of the general engineer depot won him the distinguished Service Medal and he was subsequently made director of purchase for the U. S. Army. After 1919, Gen. Rose served for five years as vice president and director of Lockwood, Greene & Co.; he has been a vice president of American Machine & Foundry Co., and of the Atmospheric Nitrogen Corp. of the Allied Chemical Dye group. From 1929 to 1938 he served as supervisor of the paint department and modern homes department, Sears Roebuck & Co.

LIEUT. COL. LACEY V. MURROW, who was granted a leave of absence as director of the Washington State Highway Department last year when called to active duty in the Air Corps, has just returned from England, where he went as an observer. He will be stationed at Camp Murray, Fort Lewis, Wash., until Sept. 15, when he will be relieved of active duty, it is reported.

JERGEN E. DISHINGTON, of Warroad, Minn. has been engaged as assistant city engineer by the city of Crookston, in anticipation of the induction into active military service of their city engineer, O. C. HELSETH. Mr. Dishington has served as county engineer of Kittson and Marshall counties, Minnesota.

MAJ. WILFRED F. BLATHERWICK, partner in the architectural firm of Hugill and Blatherwick, Sioux Falls, S. D., has been ordered to active duty at Ft. Leonard Wood, Mo.

R. J. LEWIS has been reelected city engineer of Fort Madison, Iowa.

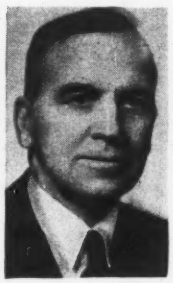
WRAY C. FURLONG, engineer at Maquoketa, Iowa, has been named as acting county engineer of Marshall County with headquarters at Marshalltown. He will hold this position for one year, while the regular engineer, J. F. ARTHURS, will be in active duty as a major in the Field Artillery Reserve.

R. L. OELIKE, for a number of years connected with the Cockrell Engineering Co. of Kansas City, Mo., is now with the Mosher Steel Co. at Dallas, Tex.

JOHN W. BILLETER, county engineer at Sidney for Kimball County, Neb. for the past 21 years, has resigned to accept a position as resident engineer for the state highway department for Cheyenne, Kimball and Deuel counties. He will be stationed at Sidney.

S. P. RAVNOS of Mandan, has been named chairman of the newly created certification board of the North Dakota Water and Sewer Works Conference. HARRY G. HANSON, of Bismarck, acting state sanitary engineer, is secretary.

INNIS WARD has been named city engineer at Duluth, Minn. Mr. Ward is a graduate of the University of North Dakota and the Dakota School of Mines. He has served as field engineer with the U. S. Geographical Survey on lignite deposits; as mining engineer in British Columbia and the Northwest. He has also been in charge of tax appraisal work, dock construction, coke oven foundation work and layout of retail coal yards. Most recently Mr. Ward was manager of a retail coal, commercial sand, gravel and ready-mix concrete business.



INNIS WARD

JOE L. CAMPBELL, civil engineering graduate of the University of Kentucky, class of 1934, recently began new work as principal inspector at the Hoosier Ordnance Plant at Charlestown, Ind. For the past two years Mr. Campbell has been superintendent in the Erlanger, Ky., area for WPA. Previous to that he worked two years with the U. S. Forest Service, for a time with the U. S. Engineers at Fort Belvoir, Va., and for two years with the Firestone Plantations Co. in Liberia, West Africa.

National Congress on Surveying and Mapping now permanent organization

Surveyor, mapper group lays plans for bettering work and status of the profession. Randall of Washington D. C. elected president

Surveyors, map makers and map users, and educators met in Washington last week for the first national conference on surveying and mapping. They asked for coordination of effort in map making, suggested fewer and better maps, discussed obtaining better recognition of surveying and formed a permanent organization to be known as the National Congress on Surveying and Mapping.

A series of resolutions were adopted and the basis laid for a formal organization to be perfected during the next year. Four classes of membership are contemplated: members (anyone interested in surveying and mapping being eligible); student members; sustaining members (instrument makers and other commercial affiliates); and honorary members. A magazine is to be started devoted to the problems of surveying and mapping. Robert H. Randall, Bureau of the Budget, Washington, D. C., was made president of the new organization; Major G. H. Harding of the Chief of Engineers Office, U. S. Army, Washington, D. C., is the new secretary, and Thomas C. Adams, associate professor of civil engineering at the University of Utah, Salt Lake City, treasurer.

Vice presidents were selected from various geographical areas as follows: E. C. Houdlette, director of the Geodetic Survey, Commonwealth of Massachusetts, Boston, Mass.; W. N. Brown, surveyor and chairman of the surveying and mapping division of the A.S.C.E., Washington, D. C.; George B. Whitmore, chief of surveys, Tennessee Valley Authority, Chattanooga, Tenn.; Prof. W. H. Raynor, department of civil engineering, University of Illinois, Urbana, Ill.; Prof. J. H. Dodds, professor of civil engineering, Iowa State College, Ames, Iowa; Ralph J. McMahon, general land office of the state of Texas, Austin, Tex.; Frank M. Johnson, supervisor of surveys, U. S. General Land Office, Denver, Colo.; H. W. Libby, chief locating engineer, state highway department, Salem, Ore.; H. H. Hodgson, district engineer, U. S. Geological Survey, San Francisco, Cal.; and Prof. Maximo Lachia, college of engineering, University of the Philippines, Manila, who will represent western territorial areas.

Elected to honorary membership were F. H. Peters of Ottawa, surveyor-general of Canada, and Dr. Pedro Sanchez of Mexico City, director of the Pan American Institute of Geography and History who were visitors at the conference.

During the past 100 years, 17 studies have been made to better coordinate surveying and mapping. Despite this, 29 federal agencies receiving annual appropriations totaling $20,000,000 maintain rather unrelated and uncoordinated systems of producing and recording information. Special emphasis was placed on the number of duplicate surveys made by the several organizations of federal, state, county and city for different purposes. Map makers and map users agreed that careful and completely compiled maps could serve many of the purposes for which duplicate surveys are presently made.

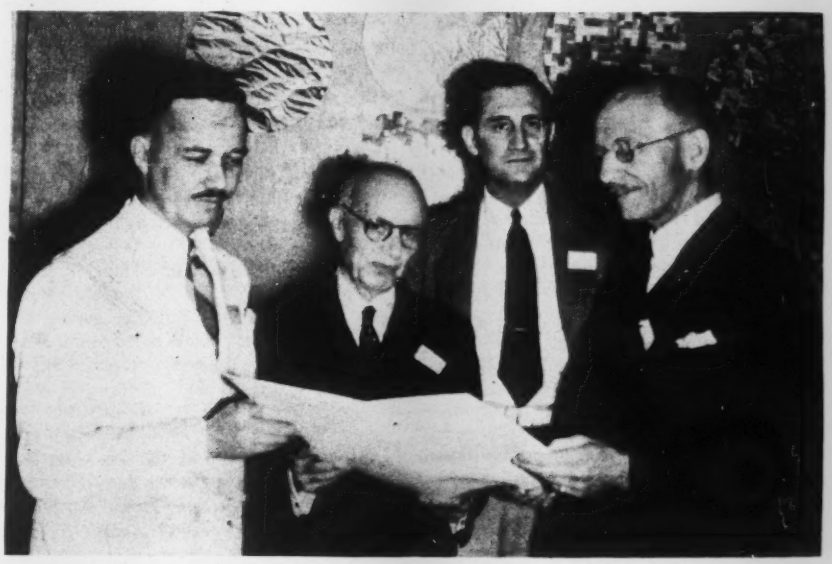
The teaching of photogrammery and aerial survey practice in engineering schools was discussed and the increased use of this method of surveying recommended. Marshall S. Wright of the Department of Agriculture stated that photogrammery was the greatest advance in survey practice in over 200 years and that the Department of Agriculture has maps of more than 90 percent of the agricultural lands of the nation.

Contrasting with the 90 percent coverage reported by agriculture, Lt. Comdr. K. P. Adams of the U. S. Coast and Geodetic Survey, stated that only 43.7 percent of the United States is mapped to reasonable standards. Commander Adams stressed the need for better publicity for maps and map making as well as the necessity for larger scale and more accurate mapping.

Ordinary surveys and surveying were discussed by members of the conference from several parts of the country. Greatest necessity here was said to be getting city and private surveyors to use state coordinate systems and tie into control surveys of high order accuracy. An important consideration in this respect seems to be advising the county surveyors and similarly interested persons as to what is available in the way of maps and control stations and then helping them to use this information.

Discussing county surveys and property maps, George D. Whitmore of the Tennessee Valley Authority stated that complete property maps will recover their cost in a few years by adding unknown properties to the tax assessor's list with the possible exception of developed land surveyed on the coordinate system.

Discussing the work of the WPA on surveys M. Y. Poling described these activities as the start of a practically permanent job. He stated there was no place at present to find out what city



Officers and foreign guests of surveying congress

In Washington last week surveyors and mappers formed the National Congress on Mapping and Surveying. Perhaps it should have been international as both Mexico and Canada sent representatives. Shown left to right are Major G. H. Harding of the Chief of Engineers Offices U. S. Army, chairman of the conference and first secretary; Dr. Pedro Sanchez of Mexico City, Director of the Pan-American Institute of Geography and History; Robert H. Randall, Bureau of the Budget, Washington, D. C., newly elected president of the organization and F. H. Peters of Ottawa, Surveyor General of Canada.

surveys are available and suggested that all engineers should encourge and promote long range planning of mapping projects to cover future needs. He pointed out that accurate control is the first necessity but that such control points must be convenient or they will not be used to tie in the usual surveys. Mr. Poling stated that WPA was asked to make wide variations in scales of maps, accuracy and other details by the project sponsors but that they attempted to keep all of their work on a very high control basis.

Military maps

Major H. B. Loper, C. of E., U. S. Army, and Lt.-Col. R. M. Herrington agreed that the first necessity of military maps was availability when needed. Many of the maps required come from other agencies, thus indicating that any map is a military map. The army is now making maps by photography with both vertical and horizontal control, one of the most difficult problems being tying them into a common control.

Discussing emergency mapping and surveying in connection with the defense program, W. N. Brown of Washington told the congress that mosaics from the agricultural agencies, state coordinate control from the Coast and Geodetic Survey, and detail topographical surveys are used for this work of locating camp and industrial sites. He pointed out that errors in the field work were probably far less than tracing cloth and print paper movement in reproducing the field notes and explained briefly the process for making a film positive and dry print which eliminates some of the difficulties.

Major W. F. Barck, C. of E., U. S. Army, discussed the organization of geodetic and precise data for national defense. He told the congress that all available data from all agencies is being assembled at the nine Corps area engineers offices and that WPA projects have been organized to process material into a suitable form for all War Department use. This plan would enable the corps area engineers to: (1) make immediate distribution of maps to topographic and artillery units for adequate control of the start of field operations, (2) assist mapping agencies to lay controlled mosaics with a minimum of field work, (3) facilitate employment of photogrammatic processes in areas which are densely ground controlled, (4) avoid delays and overcome costly repetition in furnishing these data by the establishing agencies. Major Barck said that the War Department plan calls for reduction of the geodetic control now on various datums and in too many forms of publications to some "common-denominator".

E. T. Pendleton of the U. S. Geological Survey explained the advances and value of topographic maps made by stereoscopic methods which enables one to perceive a three dimensional impression of a landscape.

Prof. Philip Kissam of Princeton University spoke in favor of the statewide plane coordinate system. He suggested also that central state survey bureaus be established to keep and coordinate all survey information.

Resolutions

At the conclusion of the meeting the following resolutions were adopted:

Endorsing the completion of the basic topographic survey and map of the United States.

Endorsing the use of the plane-coordinate system as bases for recording surveys and maps and recommending legislative approval for description of land boundaries.

Approving the establishment of state bureaus of surveying and mapping, with map archives and information offices.

Providing for cooperation with the American Bar Association and the American Society of Civil Engineers on matters relating to surveying and mapping.

Expressing interest in surveying and mapping and recommending cooperation in expediting adequate mapping throughout the American continent.

Recognizing surveying and mapping as a major branch of engineering, and asking that this recognition likewise be given by schools and organizations.

Recommending the use of stations in the control surveys established by federal, state and other agencies as bases for local surveys.

The late William Bowie, for more than a quarter of a century, chief of the Division of Geodesy of the U. S. Coast and Geodetic Survey, and the late Col. C. H. Birdseye, at one time chief topographic engineer of the U. S. Geological Survey, were prominently mentioned by the congress for the advances they assisted in making in the profession of surveying and mapping.

Hiatt Photo Service

Airbase housing near completion at Jackson, Miss.

Housing facilities for army personnel at the recently established airbase at Jackson, Miss., are nearing completion. The housing project consists of 125 typical army barracks buildings of wood frame construction; cost is estimated at nearly $2,000,000.

This aerial view shows central location of housing units in relation to the Jackson Municipal Airport. At the upper right can be seen a portion of the improvements and extensions being made at the Jackson Airport, where grading work is under way in preparation to accommodate the Army's large bombing planes. A newly constructed railroad spur track to supply the base may be seen at the extreme right.

The Yazoo and Mississippi Valley Railroad cuts diagonally across the site, and a four-lane highway is to be built parallel to the railroad to eliminate congested traffic conditions. Funds have just been made available for paving streets and sidewalks in connection with the housing project, and this work will be started at an early date.

The airbase is being constructed for U. S. Engineers by the M. T. Reed Construction Company, of Belzoni and Jackson, Miss. Black & Veatch of Kansas City, Mo., are engineers.

Civil Aeronautics Admin. Photos

Construction on both terminal building and hangar were in full swing when this view was taken. This shows how the terminal building's convex side or that nearest the reader provides a splendid view of the landing field for sightseers.

Structural frame of the 208x320 ft. arch-hangar calls for five two-hinged arches of 236-ft. span and 55-ft. rise. Doors are to be 30x175 ft. and of the sliding type.

National Airport placed in service

On June 16 commercial airlines transferred operations to the recently completed National Airport at Washington, D. C. The $25,000,000 air terminal project includes the passenger building, initial hangar, runways and service roads. The field itself has been finished for some time, but passenger use of the port has been awaiting completion of the buildings, started in May last year.

Principal problems in design of the terminal have been to arrange for a free flow of passengers and baggage while at the same time providing maximum facilities for sightseers watching field operations. This has been successfully achieved by the use of a long narrow curved building with its convex side, which is largely glass windows, facing toward the field.

Within the building a terraced pattern has been used so that even at the rear an unobstructed view of the field is permitted. A sightseers' promenade along the field side is accessible without going through the building. This walk is set somewhat lower than the waiting room level so as not to interfere with the view of those inside. Similarly, the waiting room itself is on three levels for unobstructed visibility. Even the parking space for 5,000 vehicles is on several levels such that from each spot a clear view is possible. Through so many sightseeing facilities it is hoped to keep paths clear for airline passengers.

On its upper floors, the four-story terminal houses airline offices, the Washington weather station, and the airport traffic control. A glass-walled control tower on the roof provides a clear view of every part of the field. An unusual feature is a public walkway around and a few feet below the control room for visitors to watch the dispatcher at work without getting in his line of sight.

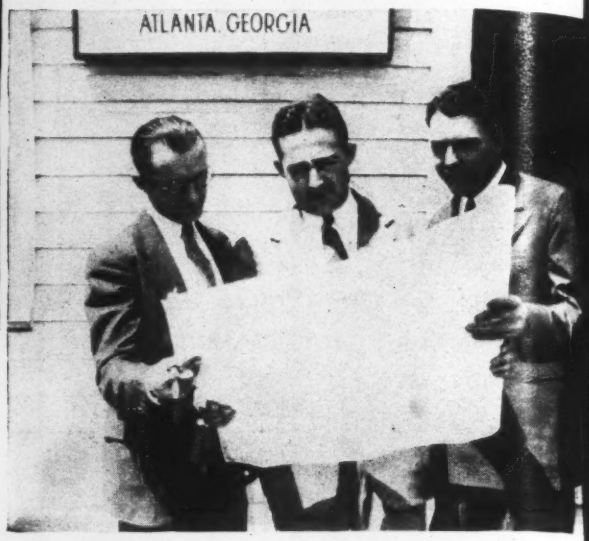
Structurally, the terminal is conventional. It is a concrete frame building with beam and girder slab floors except over the waiting room. Here, to provide a 200-ft. clear span, concrete-encased I-beams are used. These support a cellular steel floor—partly to reduce weight and partly to provide easy electrical connections to the offices above. Exterior finish is architectural concrete; as described in *ENR* Feb. 27, 1941, p. 31, extreme care was devoted to appearance in the manufacture and placing of this concrete Interior finish on the public parts of the building is precast concrete, with the aggregate exposed, on a tile back-up. The building rests on 1,400 concrete piles driven to bearing in gravel at an average depth of 40 ft.

The hangar has five two-hinged steel arches on 50-ft. centers. These have a 236-ft. span and a 55-ft. rise, and are built-up sections varying in depth from 42 to 58 in. Hinges, resting on spread footings, are tied together with a chain of eye-bars imbedded in the hangar's concrete floor. Shops and offices for the mechanical staffs of the airlines are provided in low wings at the sides.

Bids were opened in April for five more hangars of flat-roof construction. Later, another arch-roof hangar will be built. The airport is a project of the Civil Aeronautics Authority, with technical and construction services furnished by the U. S. Engineers, Public Buildings Administration, Public Roads Administration, and the WPA. Howard Cheney, Washington, D. C., is architect. John McShain, Inc., Philadelphia, is building the terminal, the first hangar, a pump house and an extension to an existing and heating plant under a $2,250,000 general contract.

MEN at WOR

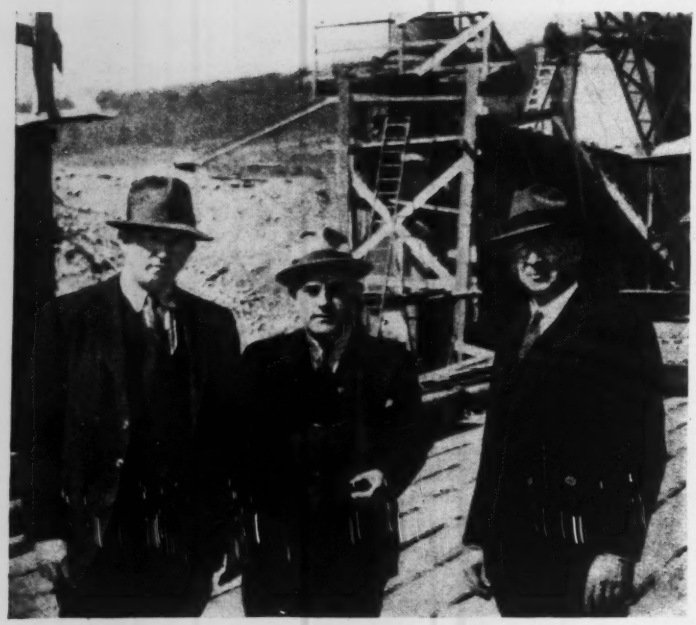
A tropical setting is always appropriate for FRED LAVIS, New York consulting engineer, for many of his varied achievements in the railway, highway and marine transportation fields come from Latin American construction jobs.



H. JAY WALLACE (left, above), chief site engineer, H. EUGENE WILLIAMS (center), architect engineer in charge of the construction, and MORELAND G. SMITH, head of the drafting department, all with the firm of Burge & Stevens, architects-engineers, of Atlanta, Ga., looking over the last minute plans for the Meridian, Miss. airport project.

W. N. EVANS (left above), project manager for the contractor and L. E. DIXON of the L. E. Dixon Co., contractor on the $16,285,000 "permanent tent camp" at San Luis Obispo, Calif. To combat difficulties of working soft ground during a 3½ mo. rainy period, the west was combed for the $2,000,000 worth of construction equipment that was collected on this job in a successful effort to have facilities ready in time for the first draftees.

Two gentlemen from North Carolina—C. W. MENGEL (left above), director of public works and L. E. DEMPSEY, superintendent of sanitation at Greensboro—take in some street scenes in Detroit at a recent convention of the American Public Works Association.



Merriman Dam of the Delaware Aqueduct is the back drop for MAX F. FREUND (left), Rondout division engineer; CHARLES G. HOERNER (center), Lackawack senior section engineer; and O'KELLY W. MYERS, northern department senior division engineer, all of the Board of Water Supply, New York City.

More hydro-power plants for south central states

Electric power for aluminum and other production in the south central states will be augmented by several projects now under construction or for which money is being made available.

The cover shows Watts Bar Dam of the TVA system scheduled for completion next winter which will have an installed capacity of 90,000 kw. At the same site a steam plant to use low grade coal is scheduled to have one 60,000 kw. unit on the line in October with two more under construction.

Kentucky Dam, near the confluence of the Tennessee with the Ohio is now scheduled for completion early in 1944 and will have 160,000 kw. installed capacity as well as more than doubling the present flood control storage on the Tennessee River.

Construction of Fort Loudoun Dam of the TVA has been speeded up to permit adding two 32,000 kw. units to the system in 1943.

Most important construction on the Tennessee tributaries is at Cherokee Dam where more than 500,000 yds. of the 770,000 yds. of concrete required has been placed since the first of the year. Storage can start this fall and three 30,000 kv. generators will be installed by next summer.

The Aluminum Co., through its subsidiary the Nantahala Light and Power Co., is constructing two dams on tributaries of the Tennessee system. Glenville Dam is expected to have a 30,000 kva. generator on the line in August and Nantahala Dam will add 63,000 kva. a year later.

A recently requested $40,000,000 for additional generating capacity on the Hiwassee River system at Ocoee No. 3, Apalachia, Chatuge and Nottely dams was described last week (*ENR* June 19, p. 923). Also mentioned last week were three other dams, Riddle Creek and Cardens Bluff on upper tributaries of the Holston, and Fontana on the Little Tennessee.

First government power development on the Cumberland River gets under way in Kentucky with bids taken June 27 for the major construction of Wolf Creek Dam. The U. S. Engineer Dept. Nashville district, are handling the engineering of this $55,000,000 project.

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Donald H. Sawyer dies in Washington

Donald H. Sawyer, chief, real estate section, Public Buildings Administration, died in Washington, D. C., June 21 following a short illness.

Col. Sawyer was born in Pulaski, Ill., Aug. 26, 1879, and graduated from the University of Illinois in 1902. Previous to graduation he had been employed by engineers engaged in municipal and sanitary engineering work, and after graduation he continued in this work for a short time but soon took up electric railway work with Illinois Traction Co. In 1907 he went to the Pacific Coast to join the Northwest Engineering Co. and five years later organized Sawyer Bros. Engineers, in Seattle and Spokane. With the outbreak of the World War he entered the Quartermaster Corps as a major in charge of warehouse and camp construction, ultimately becoming chief of Section A, Construction Division, U. S. Army.

Leaving military service late in 1919, Col. Sawyer was with the James Stewart Co., New York until 1923 when he was elected secretary of the Associated General Contractors of America with headquarters in Washington. Since then, except for a brief period, he has been in Washington, in federal service since 1931, entering government service in that year as director of the Federal Employment Stabilization Board.

Col. Sawyer was elected president of the American Society of Civil Engineers in 1939. Shortly before his death he had been elected president of the Washington Building Congress.

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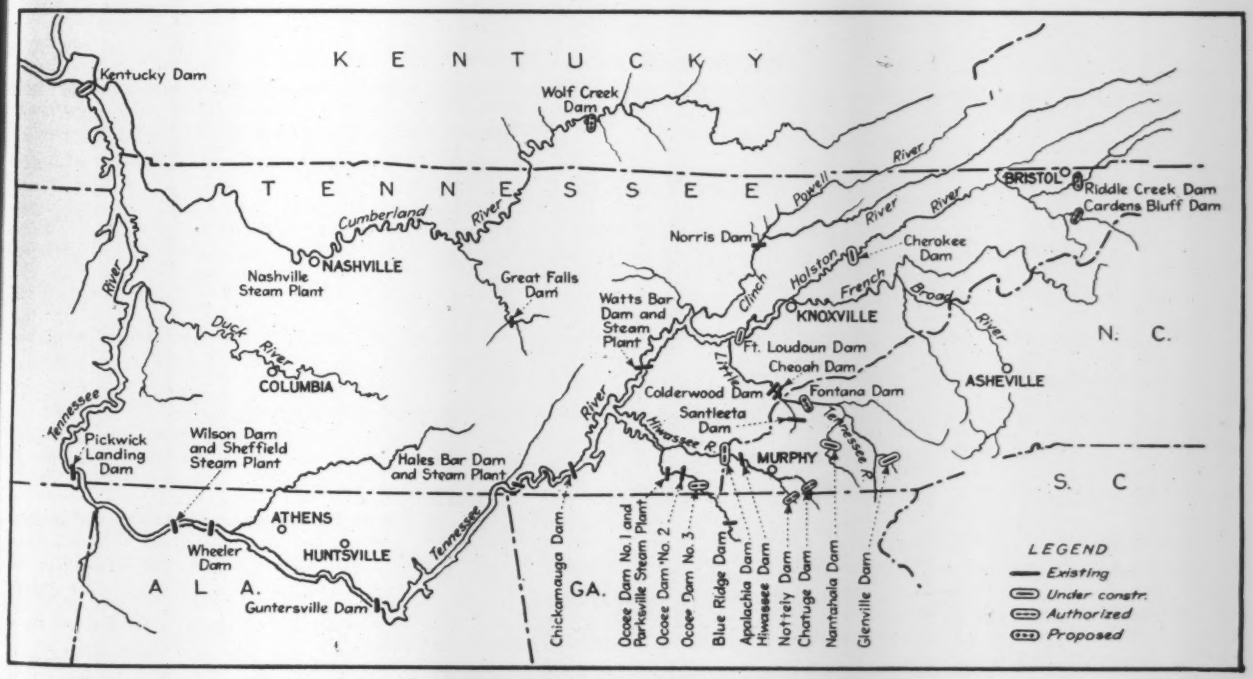
Flood control bill places burden on local interest

As it passed the house last week, the new flood control authorization bill contained a provision requiring that local interests meet the cost of lands and rights of way for local flood protection projects. Reservoir projects remain on a 100 percent federal basis except in a few cases where the engineers certify that the benefits are entirely local. This change represents a partial return to the principles of the original flood control bill of 1936, which required local financing of all land costs. Flood control was put on a completely federal basis in the act of 1938.



Present and future electric plants in the Cumberland and Tennessee Valleys

Panama Canal invites bids for Third Locks cement

Bids for furnishing 6,000,000 bbl. of portland cement for the construction of the third set of locks at the Panama Canal will be opened in the Washington, D. C. office of The Panama Canal on the morning of Aug. 5 in any quantity from 1,000,000 to 8,000,000 bbl.

Although subject to change, a tentative delivery schedule has been prepared which calls for deliveries to begin in May, 1942 and to continue until October, 1944. Monthly shipments are to begin at 50,000 bbl. and be stepped up to 320,000 bbl. monthly. Peak shipments will occur between September, 1943 and May of the following year.

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Joseph W. Barker named to Navy liaison post

Announcement has just been made of the appointment of Joseph W. Barker, Dean of Columbia University, School of Engineering, to be special assistant to Lewis Compton, Assistant Secretary of the Navy. Mr. Barker will serve as chief of the Division of Training, Liaison and of Coordination.

Besides being the Navy Department's representative working in cooperation with other government agencies, Mr. Barker will also confer with all bureaus and offices within the Navy Department on matters of civilian vocational and non-military training.

Mr. Barker was commissioned a Second Lieutenant in the U. S. Army in 1916 and was raised to the rank of Major in 1925. He served with the American Expeditionary Force in France and Germany from 1918 to 1922. He was appointed Dean of the Engineering School at Columbia University, New York, N. Y., in 1930.

It is understood that James Kip Finch, Renwick Professor of Civil Engineering, will be acting dean during Mr. Barker's absence.

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Canada to start mapping a 40,000 square mile area

The Canadian Government will undertake this summer one of the largest geological exploration and topographical mapping projects in recent years. The area to be covered under the project will be 40,000 sq. mi. in the region immediately to the east of James Bay, at the southern end of Hudson Bay. Operations will be carried out by the Mines and Geological Branch of the Canadian Department of Mines and Resources. The mapping and transportation of personnel and supplies will all be done by airplane.

JOBS OF THE WEEK

TNT PLANT ADDITION, Weldon Springs, Mo.
Fraser-Brace Engineering Co., Inc., New York, N. Y., has been awarded contract for construction of addition to TNT plant, at Weldon Springs Ordnance plant for War Department, Washington, D. C. Atlas Powder Co., Wilmington, Del., will operate plant. Total cost with equipment is $20,000,000.

HANGARS, Lakehurst, N. J.
Karno-Smith Co. and Duffy Construction Co., Trenton, N. J., have been awarded contract for the construction of 2 steel hangars 150x400 ft. and school buildings at Naval Air Station, by the Navy Department, Washington, D. C. Estimated cost $2,000,000.

WEST SIDE HIGH SCHOOL, Lansing, Mich.
Charles R. Wermuth & Son, Birmingham, Mich., will construct West Side High School for Board of Education, $1,077,707; plumbing and heating to Hickey-Shaw-Winkler, Detroit, Mich., $226,000; electrical contract to Barker-Fowler Co., Lansing, Mich., $119,695; Warren S. Holmes Co., Lansing, Mich., is architect.

ORDNANCE DEPOT, Houston, Tex.
Hubbard-Knutson-Mitchell, Houston, Tex., has been awarded contract for the construction of Ordnance Depot on Ship Canel, Harris County, by War Department, Washington, D. C. Estimated cost $8,000,000. Lockwood, Andrews and D. M. Duller, Houston, are engineers.

ORDNANCE PLANT, Charleston, Ind.
Winston Bros. Co., C. F. Haglin & Sons, Inc., Missouri Bridge & Iron Co., and Sollitt Construction Co., Charlestown, have been awarded contract for constructing ordnance plant for War Department. Cost estimated at $20,000,000. Shreve, Anderson & Walker, Detroit, Mich., are architects.

TECHNICAL AIR SCHOOL, Biloxi, Miss.
Newton & Glenn, J. A. Jones Construction Co., and Knost Construction Co., Hattiesburg and Pass Christian, Miss., have been awarded contract for technical air school by War Department, Washington, D. C. Estimated cost $10,000,000 to $12,000,000.

QUARTERMASTER DEPOT, Memphis, Tenn.
Walters & Prater, and Mark K. Wilson, Chattanooga, Tenn., will build quartermaster depot for War Department. Total estimated cost $8,000,000. Schulz and Norton, Memphis, are architects and engineers.

WAREHOUSE, Rock Island, Ill.
Permanent Construction Co., Chicago, Ill., has been awarded contract for constructing warehouse and drainage facilities at Rock Island Arsenal at $1,657,300. The Constructing Quartermaster awarded contract.

CANTONMENT, Campo, Calif.
George A. Fuller Co., Los Angeles, Calif., will build cantonment for 11th Cavalry Division, at Camp Lockett, including stables, theatre, barracks, to accommodate 1,700 men. The Construction Quartermaster took bids and awarded contract at $1,238,815. Kistner, Curtis & Wright, San Diego are architects.

HOUSING, Boston, Mass.
John Bowen Co., Boston, Mass., will construct four hundred fourteen homes including plumbing, heating, landscaping, for Boston Housing Authority, Boston. Estimated cost $1,564,500. A. Ritchie and Associates, Boston, are architects. USHA.

ORDNANCE PLANT, Union Center, Ind.
Bates & Rogers Corp., Chicago, Ill., will construct expansion to ordnance plant for War Department, Washington, D. C. Estimated cost is $8,997,000 including equipment. Todd & Brown, New York, N. Y., will operate.

DISCHARGE AND REPLACEMENT DEPOT, Fort Hamilton, N. Y.
J. A. J. Construction Co., Brooklyn, will build overseas discharge and replacement depot by Constructing Quartermaster, New York. Estimated cost $909,200.

SECTION BASE, Port Angeles, Wash.
The Austin Co., Cleveland, O., will construct section base, facilities and improvement for normal and emergency communications at Bainbridge Island Radio Station, for Bureau of Yards & Docks, Navy Dpt., Wash., D. C., $870,000.

HOSPITAL, Tacoma, Wash.
L. H. Hoffman, Portland, Ore., will construct Indian Hospital for Bureau Indian Affairs, Department Interior, $983,123.

NOTE—Additional bidding and contract news on over 800 projects large and small appear in the Construction News section beginning on page 16.

OBITUARY

HARRY A. LANE, chief engineer for the Baltimore & Ohio Railroad for the last 17 years, died June 21 at Baltimore, Md. He was a civil engineering graduate from Tufts College in 1897. Mr. Lane began his career in 1895 as a rodman on the engineering corps of the New York, New Haven & Hartford Railroad. In 1902 he was transferred to the Baltimore and Ohio as office assistant on location surveys for new lines. In 1905 he was appointed assistant engineer in charge of field engineers, and two years later was promoted to assistant engineer in charge of design of freight terminal improvements. In 1908 he was made assistant to chief engineer of maintenance of way, and two years later was promoted to assistant engineer of surveys. From July 1916 to April 1917 he was assistant to the chief engineer. He was appointed chief engineer in April, 1917.

HERBERT A. WEEKS, railroad builder, died June 17, in Cedarhurst, L. I. Mr. Weeks was graduated from the school of mines of Columbia University in 1880. He built the railroad from Port Antonio to Spanish Town in the island of Jamaica, and was the builder of the first electric power house in New York City.

THOMAS MCALLISTER, 85, building contractor, died June 9 at Pasadena, Calif.

WILLIAM F. REILLY, building contractor, died June 4 at Albany, N. Y.

HOWARD S. DREW, for the last four months Illinois Works Progress Administrator, died June 18 at Chicago, Ill. Mr. Drew was a graduate of the engineering school of the University of Wisconsin in 1914. He had previously served as regional engineer for the WPA with headquarters in Chicago and later was attached to the planning division at Washington.

ROBERT SHAPE, of Ridgefield, Conn., government architect and civil engineer, died early this month in New York, N. Y. For the last four years Mr. Shape had been in Washington as senior architect for the Resettlement Administration on housing projects and as senior engineer in the PWA. He was a first honor graduate from Cornell University in the class of 1895.

GEORGE W. ODELL, 93, retired general contractor, died June 6 at Dobbs Ferry, N. Y.

CHARLES L. AUSTIN, 52, building contractor, died June 11 at Southern Pines, N. C.

PETER ERASTUS JOHNSON, 78, contractor, died June 1 at Salt Lake City, Utah.

SIDNEY A. REEVE, 75, retired consulting engineer and former professor of hydraulic engineering at Worcester, Mass., Polytechnic Institute, died June 12 at Nyack, N. J.

CALVIN B. PRATT, 74, retired civil engineer, died recently at Miami, Fla. Mr. Pratt was a native of Bridgewater, Mass.

ELMER J. MCCAUSLAND, 77, who was dean of the college of engineering at the University of Missouri from 1914 to 1936, died recently at Albuquerque, N. M.

FRANK R. SCHWALBE, 77, contractor of LaCrosse, Wis., died June 10.

Diversion of road funds upheld by Wisconsin court

Diversion of highway funds, long the subject of widespread controversy in Wisconsin, was held legal last week when the state supreme court affirmed a recent decision by Dane County circuit court.

The lower court had held that "road money does not constitute a trust fund segregated for highway work only." The ruling was made in the case of Edwin Friedrich and E. J. Philipp, Oshkosh contractors.

Justice Joseph Martin of the supreme court said the case hinged on whether highway revenues are trust funds.

CONTRACTS AND CAPITAL

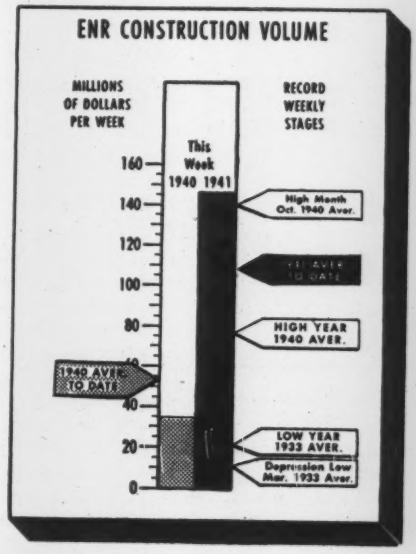
ENGINEERING CONSTRUCTION awards for the week, $143,520,000, top the $100,000,000-mark for the fourth straight week, and gain 312 percent over the total for the corresponding 1940 week. They are, however, 17 percent lower than the year's high of a week ago.

The high volume of public buildings boosts the public construction total 443 percent over a year ago, but it is 18 percent below the record volume of last week. Private awards are up 40 percent compared with last year, but are 14 percent under a week ago.

The current week's volume brings 1941 construction to $2,841,403,000, a 104 percent increase over the 26-week 1940 total. Private awards, $734,418,000, are 52 percent higher, and public construction, $2,106,985,000, is up 133 percent as a result of the 564 percent gain in federal work.

Further expansion of ordnance facilities at Charlestown, Ind., Weldon Springs, Mo., and Union Center, Ind., and an ordnance depot at Houston, Tex., account for $56,977,000 of the $80,272,000 public building total, the fifth highest of the year. In addition to public buildings, waterworks, sewerage, bridges, industrial buildings, streets and roads, and unclassified gain over the 1940 week. Public buildings are below last week, but each of the above classes of work show increases.

New capital for construction purposes for the week totals $21,826,000, an increase of 48 percent over the total for the 1940 week. New construction financing for the year to date, $3,350,544,000, is 430 percent higher than in the first half of last year.



CONTRACTS

(Thousands of dollars)

	Week Ending June 27 1940	June 19 1941	June 26 1941
Federal	$4,752	$128,310	$95,318
State & Municipal	18,696	26,375	32,130
Total public	$23,448	$154,685	$127,448
Total private	11,421	18,621	16,072
TOTALS	$34,869	$173,306	$143,520
Cumulative 1941 (26 weeks)			$2,841,403
1940 (26 weeks)			$1,389,616

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1940 26 weeks	1941 26 weeks
NON-FEDERAL	$632,535	$459,207
Corp. Securities	89,218	138,202
State & Mun.	449,164	254,232
U.S.H.A. loans	87,204	30,399
R.F.C. loans	6,949	2,719
R.E.A. loans	.....	500
FEDERAL	.....	$2,891,337
TOTAL CAPITAL	$632,535	$3,350,544

FHA MORTGAGES

	Week Ending June 22 1940	June 14 1941	June 21 1941
Selected for appraisal	$26,037	$32,288	$33,797*
Cumulative 1941 (25 weeks)			718,767*
1940 (25 weeks)			608,856

* Subject to revision.

ENR INDEX NUMBERS

Index Base=100		1913	1926
Construction Cost	June '41	256.79	123.44
Building Cost	June '41	209.41	113.20
Volume	May '41	275	121

CONTRACT UNIT PRICES

What contractors are bidding on different kinds of construction work

LANDWARD LOCK MASONRY MISSISSIPPI RIVER LOCK AND DAM

OWNER: U. S. Engineer Office, St. Paul, Minn.

PROJECT: Construction of masonry work for new lock at Lock and Dam No. 2, Mississippi River, landward of existing lock located on right bank of river about 1.4 miles upstream from Hastings, Minn. This contract includes coffer-dam, piling, concrete and other appurtenant work. The lock will be standard size Mississippi River lock, of chamber size 110-ft. by 600-ft., and will be founded on piling.

CONDITIONS: Contractor is required to furnish all material, plant and labor, and complete work in 480 days. Rail, highway and water transportation facilities available. Wage rates are: skilled labor, $1.00 to $1.50 per hr.; semi-skilled, 50 to 85c.; and common, 50c.

BIDS: Six bids were opened May 13, 1941, ranging from the contract low of $1,532,878 to $1,772,707.

LIST OF BIDDERS:

1. Winston Bros. Co., Minneapolis, Minn. (contract) $1,532,878
2. United Construction Co., Winona, Minn. 1,536,168
3. Fegles Constr. Co., Ltd., Minneapolis, Minn. 1,553,150
4. Michael Pontarelli & Sons, Chicago, Ill. 1,638,896
5. A. Guthrie & Co., Inc., St. Paul, Minn. 1,668,311
6. Spencer, White & Prentis, Inc., New York, N. Y. 1,772,707

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Cofferdam protection	L. S.	$200,000.00	$46,906.39	$353,144.00
2. Excavation, common	253,000 c. y.	.40	.56	.74
3. Excavation, foundation	15,000 c. y.	1.00	.56	.83
4. Backfill	52,000 c. y.	.40	.22	.25
5. Grouting, cut-off wall	263 c. y.	50.00	27.00	40.00
6. Piling, round timber	144,175 l. f.	.60	.69	.60
7. Piling, steel bearing	39,340 l. f.	2.50	3.02	2.20
8. Piling, steel sheet	117,230 s. f.	1.50	1.55	1.42
9. Piling, flexible joint	6 ea.	900.00	450.00	452.00
10. Remove exist. steel sheet piling	8,730 s. f.	1.00	.27	.11
11. Install water supply pump	L. S.	830.00	178.00	490.00
12. Protection stone	195 c. y.	7.00	6.46	5.00
13. Class A concrete	1,285 c. y.	22.00	28.04	16.95
14. Class B concrete	49,520 c. y.	13.00	14.82	9.72
15. Steel, wall-armor	185,550 lb.	.098	.11	.09
16. Structural steel	103,920 lb.	.12	.13	.13
17. Steel, miscellaneous	73,575 lb.	.18	.18	.17
18. Concrete reinforcing steel	972,540 lb.	.05	.06	.056
19. Steel castings, class 1 and 2	17,350 lb.	.28	.35	.32
20. Steel castings, class 0	9,045 lb.	.24	.26	.24
21. Iron castings	10,170 lb.	.23	.20	.19
22. Copper — silicon — alloy	170 lb.	3.00	2.50	2.58
23. Copper water seal	4,550 lb.	1.09	.70	.68
24. Conduit, rigid metal, 1½ and 2-in.	360 l. f.	1.10	1.64	1.64
25. Conduit, rigid metal, 2½ and 3-in.	375 l. f.	2.51	3.61	3.60
26. Conduit, fibre, 3-in	5,220 l. f.	.50	.28	.27
27. Uplift pressure pipes (complete)	520 l. f.	1.40	.90	.45
28. Embedded water pipes (complete)	L. S.	300.00	239.00	152.00
29. Special water seal	6 ea.	140.00	419.00	237.00
30. Expansion joint filler	L. S.	12,000.00	8,000.00	7,900.00
31. Backwater trap and drain (complete)	4 ea.	70.00	59.37	40.00
32. Tile gage	77 l. f.	8.00	12.00	5.00
33. Electrical grounding system	L. S.	400.00	396.00	257.00
34. Moving buildings and misc. salvage work	L. S.	1,400.00	5,400.00	1,988.00
35. Temporary driveway	L. S.	5,000.00	2,000.00	2,570.00
36. Relocation of fences	L. S.	700.00	950.00	210.00
37. Control station drains (complete)	L. S.	100.00	116.00	49.00

BRIDGE, PENNSYLVANIA

OWNER: Pennsylvania Dept. of Highways, Harrisburg. T. C. Frame, chief engineer; E. E. Brandow, bridge engineer.

PROJECT: Construction of steel deck cantilever bridge, and reinforced concrete paving 1,515 feet of Legislative Route 187, Section 6-B, Wilkins and Patton Townships, Allegheny County, Pa. Pavement width 30-ft. Bridge to be constructed over railroad tracks.

CONDITIONS: Contractor to furnish all materials and complete work in 380 calendar days. Rail and highway transportation facilities available. Involves great deal of superstructure work, little concrete needed. Wage rates are: skilled labor, $1.00 per hr.; semi-skilled, 60c.; and common, 50c.

BIDS: Eight bids were opened April 4, 1941, ranging from the contract low of $548,855 to $685,057.

LIST OF BIDDERS:

1. Dinardo, Inc., Pittsburgh, Pa. (contract) $548,855
2. Harrison Constr. Co., Pittsburgh, Pa 555,895
3. Frank & Kukurin, Wilmerding, Pa 578,649
4. Midwest Constr. & Asphalt Co., Uniontown, Pa 582,308
5. Ferguson & Edmondson Co., Pittsburgh, Pa 593,659
6. John F. Casey Co., Pittsburgh, Pa 594,673
7. McCrady Constr. Co., Pittsburgh, Pa 599,365
8. Navarro Corp., Pittsburgh, Pa 685,057

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Clearing and grubbing	L.S.	$2,000.00	$2,000.00	$300.00
2. Class I excavation	5,080 c. y.	.75	.60	.70
3. Class II excavation	3,585 c. y.	2.50	3.00	4.00
4. Borrow excavation	9,802 c. y.	.75	.50	.50
5. Subgrade	990 s. y.	.20	.15	.20
6. Shoulders	270 l. f.	.20	.30	.30
7. 9-in. rein. cem. conc. pavmt.	990 s. y.	3.50	3.30	3.00
8. Rein. cem. conc. wearing surf., br. floor	703 s. y.	1.50	2.50	2.50
9. Class A. concrete	496 c. y.	32.00	42.00	30.00
10. Class B concrete	1,974 c. y.	30.00	24.00	22.00
11. Plain steel bars	228,180 lb.	.05	.05	.05
12. Plain structural steel	271,000 lb.	.063	.068	.07
13. Fabricated struct. steel	3,835,000 lb.	.0845	.0875	.08
14. Stone backfill, structures	10 c. y.	18.00	3.50	5.00
15. Type F. inlet	1 ea.	100.00	100.00	100.00
16. 15-in. rein. cem. conc. pipe	102 l. f.	3.00	3.00	3.00
17. 4-in. tile underdrain	606 l. f.	.90	.75	1.00
18. Tile foundation underdrain, type B, 4-in	40 l. f.	.75	.70	.80
19. 4-in. tile outlets	100 l. f.	.75	.70	.80
20. Metal railing	2,414 l. f.	7.65	8.00	8.00
21. Steel beam bridge flooring	42,230 s. f.	1.17	1.20	1.40
22. 10-ft. diam. foundation columns	393 l. f.	60.00	60.00	90.00
23. Treated lumber	9 M bm.	130.00	150.00	140.00
24. Pl. cem. conc. curbing, type A	62 l. f.	2.00	1.50	2.00
25. Plain cement conc. sidewalks	10 s. y.	3.50	3.00	4.00
26. Type 1-A, 2-A, 3-A, or 4-A guard fence	144 l. f.	1.00	1.00	1.00
27. Type 1-B, 2-B, 3-B or 4-B guard fence	112 l. f.	1.00	.90	1.00
28. Type 1, 2, 3 or 4 end anchorages	2 ea.	25.00	25.00	25.00

EXCAVATION, CONCRETE INVERT CONTINENTAL DIVIDE TUNNEL

OWNER: Bureau of Reclamation, Denver, Colo.; S. O. Harper, chief engineer.

PROJECT: Excavation of the Continental Divide Tunnel from Sta. 72+00 to Sta. 152+00, and the placing of the concrete invert of the tunnel from Sta. 6+00 to Sta. 148+00, Colorado-Big Thompson project, Colorado. Placing of concrete invert begins at West Portal of tunnel, and extends about 2.7 miles in a northeasterly direction.

CONDITIONS: Government to furnish cement, powdered admixture, calcium chloride, drain tile, tar paper, pipe and fittings for permanent installations in connection with grouting and weep pipes, permanent steel tunnel supports, steel tunnel-liner plates, timber ties, timber decking, anchor bolts, anchor bolt sleeves, and nails for elevated track, all permanent ventilating and drainage pipes. Contractor to furnish sand, form materials, wire, wire ties, temporary supports, water, permanent timbering, spikes, drift pins, dowels, timbering used for filling spaces outside of permanent timber lagging, washed gravel and spalls, material for tamped fills, gravel or broken rock, calking materials, sawdust for grouting operation, and all other material not part of completed construction work. Time for completion is 500 calendar days. Rail and highway

transportation facilities available to vicinity of work, but access roads to actual site to be provided by contractor.

BIDS: Four bids were opened June 5, 1941, ranging from the low of $832,906 to $991,088.

LIST OF BIDDERS:

1. Stiers Bros. Constr. Co., St. Louis, Mo $832,906
2. Platt Rogers, Inc., Pueblo, Colo 952,280
3. Ed. H. Honnen Constr. Co., Colorado Springs, Colo 964,460
4. J. N. Gordon and Dale Hinman, Denver, Colo 991,088

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Excavation, all classes, tunnel	40,000 c. y.	$13.00	$16.00	$16.30
2. Excav., all classes, sumps and recesses in tunnel	50 c. y.	15.00	40.00	20.00
3. Excav., all classes, tun. enlargement	1,000 c. y.	15.00	30.00	18.00
4. Excav., strip. sand and grav. deposits	3,000 c. y.	1.00	.40	.20
5. Tamped fills, corners of tun. invert	6,600 f.	.75	2.00	.50
6. Install perm. steel tun. supports	1,200,000 lb.	.03	.03	.035
7. Furn., erect perm. tunnel timbering	430 Mbm.	90.00	110.00	150.00
8. Install steel tunnel-liner plates	50,000 lb.	.03	.05	.03
9. Washed gravel or spalls outside tunnel-liner plates	100 c. y.	6.00	5.00	4.00
10. Remove perm. steel tunnel supports	10,000 lb.	.04	.05	.085
11. Remove perm. timbering in tunnel	3 Mbm.	50.00	100.00	100.00
12. Re-erect perm. timbering in tunnel	2 Mbm.	50.00	100.00	100.00
13. Install ventilating pipe	26,200 l. f.	1.25	.40	.60
14. Install drainage pipe	15,000 l. f.	.75	.50	.60
15. Gunite in gunite coating	100 c. y.	25.00	30.00	27.00
16. Constr. 6-in. tile drains under conc. invert.	4,600 l. f.	2.00	1.00	1.00
17. Inst. weep pipes from drainage sumps	350 lb.	.20	.20	.20
18. Drill feeler or pilot holes ahead of tunnel excav.	10,000 l. f.	.50	.50	.50
19. Drill grout holes, follow tun. excav.	3,000 l. f.	.50	.50	1.00
20. Place grout pipe and fittings	1,600 lb.	.25	.50	.20
21. Grouting ahead of tun. excav.	4,700 c. f.	1.50	2.00	2.00
22. Grouting following tun. excav.	1,600 c. f.	1.50	2.00	2.00
23. Grouting behind steel tun. liner plates	1,000 c. f.	1.50	1.50	2.00
24. Conc. in tunnel invert	6,380 c. y.	17.20	17.50	16.00
25. Constr. track on conc. invert	14,200 l. f.	2.00	1.40	1.60

EMBANKMENT AND SPILLWAY YOUGHIOGHENY DAM, PA.

OWNER: U. S. Engineer Office, Pittsburgh, Pa.

PROJECT: Construction of embankment and spillway for Youghiogheny Dam on the Youghiogheny River, approximately one mile south of Confluence, in Somerset County, Pa. Work involves the following major features: clearing, grubbing and stripping; cofferdams; spillway excavation; construction of embankment; concrete lining for spillway; and roadway and guard fences.

CONDITIONS: Contractor to furnish all materials and complete work in 1,350 calendar days, without interference to others employed on construction of outlet works. Railroad and highway transportation facilities available. Wage rates specified as minimum are: skilled labor, 90c. to $1.40 per hr.; semi-skilled, 65 to 90c.; and common, 55c.

BIDS: Three bids were opened May 2, 1941 ranging from the contract low of $3,675,265 to $4,461,775. Engineers estimate, $3,656,189.

LIST OF BIDDERS:

1. Hunkin-Conkey Constr. Co., Cleveland, Ohio, and Shofner, Gordon & Hinman, Los Angeles, Calif. (contract) $3,675,265
2. George M. Brewster & Son, Inc., Bogota, N. J 3,988,542
3. Frank Mashuda Co., Milwaukee, Wis.; John F. Bloomer, Appleton, Wis.; Joseph D. Bonness, Inc., Milwaukee, Wis.; Herman Holmes, Crystal Falls, Mich. 4,461,775

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Clear, grub, remove exist. struct.	27 ac.	$2,200.00	$1,250.00	$1,500.00
2. Cofferdam	L. S.	175,000.00	32,000.00	299,000.00
3. Common excavation	680,000 c. y.	.66	.65	.57
4. Rock excavation	1,894,000 c. y.	.66	.90	.72
5. Special rock excavation	7,000 c. y.	13.00	8.50	10.00
6. Crushing rock	963,500 c. y.	.21	.50	.46
7. Load and haul from stockpile	100,000 c. y.	.24	.35	.30
8. Excavation in borrow area	770,000 c. y.	.26	.25	.45
9. Selected impervious fill	430,000 c. y.	.09	.10	.09
10. Random fill	1,793,000 c. y.	.08	.10	.12
11. Filter fill	79,000 c. y.	.15	.05	.70
12. Rock fill	791,000 c. y.	.15	.10	.20
13. Rolling fill for each add'l 3 trips	440,000 sq. (100 s. f.)	.01	.005	.03
14. Rock gutters	550 c. y.	14.00	7.00	16.00
15. Settlement gages	L. S.	1,000.00	500.00	750.00
16. Core drilling, 2-in	3,000 l. f.	2.00	1.50	2.16
17. Percussion drilling	42,000 l. f.	.90	.50	1.44
18. Furnishing cement	68,000 bbl.	2.15	2.40	2.68
19. Furn., install anchor bars	180,000 lb.	.09	.05	.09
20. Furn., install misc. metal	15,000 lb.	.20	.10	.065
21. Pressure grouting	20,000 bag cem.	1.00	.50	1.00
22. Gunite	2,000 c.f. sand	1.00	1.00	1.60
23. Concrete in grout cap	850 c. y.	20.00	9.00	14.00
24. Concrete in spillway	43,000 c. y.	10.50	7.75	12.70
25. Porous concrete	7,600 c. y.	13.00	8.15	14.50
26. Conc., gutters and headwalls	310 c. y.	22.00	15.15	26.00
27. Furn., install corr. metal pipe	230,000 lb.	.12	.08	.12
28. Porous drain tile	9,300 l. f.	1.30	.55	1.20
29. Road surfacing	9,600 s. y.	.90	1.20	1.60
30. Highway guard fence	4,600 l. f.	1.00	.95	1.00
31. Landscaping and planting	8,000 s. y.	.25	.30	.20
32. Reinforcing steel	700,000 lb.	.055	.05	.05

AIRPORT PAVING AND DRAINAGE ENDICOTT, N. Y.

OWNER: Civil Aeronautics Administration, represented by the U. S. Engineer Office, Binghamton, N. Y.

PROJECT: Paving and drainage of the Tri-Cities Airport, located along right bank of Susquehanna River, about 3 miles west of Endicott, Broome County, N. Y. Involves construction of soil-cement base course; bituminous plant-mix top course; bituminous seal coat; runway shoulder treatment; drainage system; levee embankment and drainage structure; and top-soiling, sodding and seeding. Subgrade previously constructed under another contract.

CONDITIONS: Contractor to furnish all materials and complete work in 110 calendar days, without interference to other contractors on job. Highway and rail transportation facilities available near site of work. Minimum wages specified are: skilled labor, $1.00 to $1.50 per hr.; semi-skilled, 65 to 90c.; and common, 62½c.

BIDS: Three bids were opened May 6, 1941, ranging from the contract low of $182,429 to $193,668. Engineer's estimate $194,523.

LIST OF BIDDERS:

1. Binghamton Constr. Co., Inc., Binghamton, N. Y. (contract) $182,429
2. D. W. Winkelman Co., Syracuse, N. Y 183,944
3. Zara Contracting Co., Hewlett, L. I., N. Y 193,668

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Borrow excavation	10,000 c.y.	$0.30	$0.45	$0.23
2. Topsoiling	2,050 c. y.	1.25	1.40	1.10
3. Sodding	5,800 s. y.	.50	.60	.50
4. Seeding	22,000 s. y.	.04	.06	.05
5. Dumped riprap	100 c. y.	5.00	4.50	12.00
6. Rock paving, grouted or un-grouted	400 c. y.	9.00	6.50	12.00
7. Concrete	60 c. y.	24.00	22.00	27.00
8. Reinforcing steel	5,200 lb.	.06	.06	.07
9. Constr. soil-cement base crse., runway	80,000 s. y.	.34	.34	.34
10. Cement for soil-cem. base crse	8,200 bbl.	2.80	2.70	2.70
11. Bitum. prime coat, runways (tar)	20,000 gal.	.11	.12	.12
12. Bitum. plant-mix top crse	6,600 ton	7.25	8.00	5.50
13. Aggregate, bitum. seal coat, runway	600 ton	2.25	1.75	2.25
14. Asphalt for bitum. seal coat	16,000 gal.	.09	.10	.10
15. Aggregate for bitum. trtmt., runway shoulders	930 ton	3.00	2.25	3.00
16. Tar for bitum. trtmt., runway should.	21,000 gal.	.11	.115	.10
17. Asphalt for bitum. trtmt., shoulders	18,000 gal.	.09	.10	.10
18. Catch basins, complete	53 ea.	175.00	120.00	180.00
19. 8-in. vit. clay or non-rein. conc. pipe drains, open joint	5,420 l. f.	2.50	2.60	4.08
20. 10-in. as above	2,630 l. f.	2.60	2.80	4.14
21. 12-in. as above	1,270 l. f.	2.80	3.10	4.22
22. 15-in. as above	1,050 l. f.	3.10	3.50	5.25
23. 18-in. as above	280 l. f.	3.60	3.70	6.27
24. 12-in. vit. clay or non-rein. conc. pipe drains, closed joint	180 l. f.	2.40	1.25	2.56
25. 15-in. as above	290 l. f.	2.70	1.55	3.27
26. 18-in. as above	680 l. f.	3.30	1.75	3.97
27. 15-in. corr. metal pipe drains	200 l. f.	5.50	2.85	4.60
28. 24-in. corr. metal pipe drains	32 l. f.	10.00	7.00	7.05
29. 48-in corr. metal pipe drains	150 l. f.	15.00	14.00	11.55
30. 8-in. rein. conc. pipe drains, open joint	1,690 l. f.	3.00	2.95	4.42
31. 15-in. as above	270 l. f.	3.65	3.80	5.65
32. 12-in. rein. conc. pipe drains, closed joint	200 l. f.	3.00	1.75	2.87
33. 15-in. as above	390 l. f.	3.50	2.00	3.67
34. Drainage outlet head walls	8 ea.	75.00	120.00	145.00
35. 12-in. automatic drainage gates	1 ea.	35.00	30.00	22.00
36. 15-in. automatic drainage gates	4 ea.	40.00	45.00	26.00
37. 18-in. automatic drainage gates	2 ea.	60.00	60.00	37.00
38. Wrt. iron pipe handrail	56 l. f.	3.00	5.00	3.00
39. Comb. automatic and slide gates, 48-in.	3 ea.	400.00	500.00	308.00
40. Corrugated metal seep rings	2 ea.	400.00	300.00	300.00
41. Levee embankment	6,000 c. y.	.30	.26	.54

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

Location of ENR Correspondents

Symbols and Abbreviations Include:

♦ Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger; water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply	Unclassified
Sewers, Waste Disposal	Latin America
Bridges, Grade Cross'gs	Public Buildings
Streets & Roads	Commercial Buildings
Earthwork, Waterways	Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: All low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

WATER SUPPLY

PROPOSED WORK

Calif., Millbrae — Millbrae Highland Co., 20,000 cu. yd. excav., ditches, water, sewer, gas sys. and street paving for privately owned area. Over $40,000.

Conn., Norwich—Bd. Water Comrs., M. Kane, supt., City Hall, bids soon, filtration sys., 2 story, brick, concrete filtration plant, freight elevator, Deep River Reservoir, Deep River. $300,000. Buck, Seifert & Jost, 112 E. 19 St., New York, N. Y., engrs. CD 4/1—ENR 4/3.

†Idaho, Boise — Federal Works Agency, Wash., D. C., water supply sys. for area adjacent to Army Air Base. $15,000.

Ill., Decatur—Bids soon, imprv. WW plant, new boiler, plant addn. $110,000. Warren & Van Praag, Decatur, engrs. CD 2/21—ENR 2/27.

★**Kan., Kansas City**—Prairie Twp., 48 mi. water lines, $548,386. C. W. McLaughlin, Commercial Natl. Bank Bldg., Kansas City, Kan., engr.

Minn., Sebeka—J. Pudas, village clk., WW sys. $15,000.

N. J., East Orange—Watermains, Amherst St. and Ashland Ave. $40,000. WPA. W. Willegarod, Town Hall, town and WPA engr.

O., Akron—Enlarging, imprv. water works sys. W. Peters, dir. Pub. Serv.

O., Bloomingburg — WW sys., watermains, hydrants, pump. station, 100,000 gal. elevated storage tank. $65,000. P. W. Elwell, 5005 Euclid Ave., Cleve.and, engr.

O., Cridersville—A. C. Katterheinrich, installing WW sys., laying watermains, storage tank. $37,000.

O., Sardinia—WW and sewerage sys., reservoir, dam, water tower. $70,000. Applied for WPA approval. Burgess & Niple, 568 E. Broad St., Columbus, engrs.

Pa., Bethlehem — **A.** Wear, councilman in charge, c.i. watermain, Kelchner Rd. area. $15,800. R. L. Fox, E. Broad St., city engr.

Pa., Corry—Aero Supply Mfg. Co., Inc., 611 W. Main St., bids soon, 125,000 gal. water tank. $20,000. Meyers & Johnson, Commerce Bldg., Erie, archts.

★**Tex., Galveston**—B. Harris, mayor, WW imprvs., pump. station, wells, etc. $500,000. Ford, Bacon & Davis, 150 Bway., New York, N. Y., consult. engrs. CD 5/22—ENR 5/29.

†Tex., San Antonio — U. S. Eng., Federal Bldg., Galveston, bids soon two 200,000 gal. steel water tanks, 2 steel ground reservoirs. $90,000.

Wash., Cashmere—L. E. Jarvis, water supt., drilling well.

Wash., Centralia—Laying 13,300 ft. 18 in. pipe and installing hydrants. R. Welsh, City Hall, engr.

Wash., Lind—Drilling deep well with 175 gpm pump and installing 2,000 ft. 6 in. pipe. L. E. Weston, City Hall, engr.

Wash., Pinehurst—Pinehurst Water Dist., revised plans water supply line. $100,000. Parker & Hill, Smith Tower, Seattle, engrs.

Wash., Seattle—12 in. watermain in Greenwood Ave. and Sand Point Way, $30,000; N. 195 St., $23,000. C. L. Wartelle, County-City Bldg., engr.

★**Wash., Seattle**—Metropolitan Water Dist., water sys. to serve area across Lake Washington from here. $2,000,000. Parker & Hill, Smith Tower, engrs. CD 4/4—ENR 4/10.

Wash., Wenatchee—Laying 4,000 ft. 6 and 18 in. c.i. pipe. WPA. J. Dunstan, City Hall, engr.

W. Va., Fairmount—Pump. station, watermains, storage tank, etc. $210,000.

BIDS ASKED

Bids Asked July 1

Kan., Topeka—F. W. Knapp, clk., 1 m.g. elevated steel water storage tank. $12,000. CD 6/23.

Bids Asked July 7

Calif., Burlingame — Water and sewerage sys., paving streets, Oak Grove Manor. $39,000.

Fla., Fort Lauderdale—City Comm., City Hall, watermain, one 500,000 gal. elevated steel water tank, screens for 7 wells, centrifugal pump for WW sys. Solomon & Keis, 257 Bway., Troy, engr.; adv. ENR 6/26.

Pa., Emmaus—Boro Council, O. T. Iobst, secy., furnishing, installing complete water sterilization and house for same at each 3 water reservoirs of borough water works. Over $15,000. W. H. Boardman, 426 Walnut St., Phila., engr.

Bids Asked July 9

N. Y., Binghamton—Dpt. Mental Hygiene, State Office Bldg., Albany, W. J. Tiffany, comr., standpipe, Binghamton State Hospital. $23,792.

Bids Asked

†N. H., Portsmouth—Yards & Docks, Navy Dpt., Wash., D. C., 200,000 gal. steel tank and tower.

LOW BIDDERS

Calif., San Francisco — P. Utilities Comn., City Hall, laying 4 in. steel cross-town discharge main, WD 285, from M. J. Lynch, Bernevald and Oakdale Sts. **$175,370.** CD 6/3—ENR 6/5.

D. C., Wash. — District Comrs., District Bldg., June 3, watermain between Good Hope Rd. and 25 St. S.E., and vicinity Alabama Ave. and Massachusetts Ave. S.E., from L. Butler Co., 8416 Georgia Ave., Silver Spring, Md. **$139,340.** CD 5/21.

†Ill., Scott Field (Belleville)—U. S. Eng., 816 U. S. Courthouse and Customhouse, St. Louis, Mo., 3 m.g. steel water reservoir, from Graver Tank & Mfg. Co., Inc., East Chicago, Ind. **$47,428.** CD 6/6—ENR 6/12.

Ill., Joliet—Watermain addns., from Pietro Scalzitti, 3140 N. Linder St., Chicago. **$24,323.**

Kan., Kansas City—City, June 11, Contr. 104, screens, from Link Belt Co., 1004 Baltimore St., Kansas City, Mo. **$45,985*****Contr. 105, pumps, from DeLaval Steam Turbine Co., Dwight Bldg., Kansas City, Mo. **$56,300***** Contr. 106, valves, from Ludlow Valve Mfg. Co., R. A. Long Bldg., Kansas City, Mo. **$67,922.** Est. $150,00. CD 6/4.

CONTRACTS AWARDED

†Fla., Jacksonville—U. S. Eng., P. O. Box 4970, water supply sys., to I. H. Smith Co., Barnett Bldg. **$19,994.**

†Ga., Columbus—Con. Q.M., Fort Benning, reservoir, to Pearce Williams Contg. Co., Columbus. **$31,729.**

N. J., East Orange—Sheeting, watermains, **WPA. $31,000.** CD 5/27—ENR 6/5.

N. J., Newark—Water Dpt., City Hall Annex, sheeting, watermains. **WPA.** $40,100. W. Banks, City Hall Annex, Newark, City and WPA engr.

N. C., Bailey—W. B. Privette, mayor, water and sewerage sys. **WPA. $120,538.**

Pa., Cecil—Bd. Comrs. South Fayette Twp., J. Barrett, secy., Cecil, waterlines, etc., **WPA. $150,000.** W. J. Murdoch, 1123 Cornell Ave., Pittsburgh, engr.

Pa., Mt. Penn—Boro Council, surface water drainage sys., west end of boro, own forces and **WPA. $90,000.** R. Mast, boro engr. CD 6/11—ENR 6/19.

Tex., Fort Worth—Imprv. water sys. **WPA. $198,095.**

†Utah, Ogden—Con. Q.M., 250,000 gal. elevated steel water tank, valve chamber, piping, to Pittsburgh-Des Moines Steel Co., 1015 Tuttle St., Des Moines, Ia. **$37,765.** Bids 5/29. CD 5/22.

†Wash., Fort Lewis — Con. Q.M., drilling water well, Inv. 6105-41-98, to Roscoe Moss, 4360 Worth St., Los Angeles, Calif. **$14,750.** Bids 5/29.

†Wash., Spokane—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., drilling, casing well, concrete pumphouse, reinforcing 11x110 ft. concrete reservoir. **WPA. $49,681.**

Wis., Appleton—Imprv. WW. sys., installing coagulating basin, aerator, etc., to Central Contg. Co., Oshkosh. **$19,210.** Orbison & Orbison, 206 W. College Ave., engrs. CD 6/12—ENR 6/19.

Wis., Sturgeon Bay—Exten. water sys. sanitary sewerage sys. imprv. streets. **WPA. $200,000.**

SEWERS, WASTE DISPOSAL

PROPOSED WORK

Calif., Atherton—Sewerage sys. western section town. $45,000.

Calif., Oakland—Completing plans 1,000 lin. ft. 8 in. vitr. sewers, Conrad Court area, etc. W. N. Frickstad, city engr.

Calif., San Mateo—Completing plans 815 lin. ft. 12- to 36-in. storm drains, catch basins, etc., streets between 27 and 31 Aves., El Camino Real and Alameda de las Pulgas. CD 5/27—ENR 6/5.

Calif., San Mateo—Completing plans 9,806 lin. ft. 4- to 8-in. v.c. sewers, etc. portions 37, 38 and 39 Aves., etc., sewage pump station.

Calif., Torrance—Taylor & Taylor, 725 S. Spring St., Los Angeles, 2,000 ft. 8 in. sewers, wyes, manholes, etc.

Conn., Bridgeport—P. Wks. Dpt., P. Brewster, dir., preliminary plans sewage disposal plant, East End, Walker St. and Seaview Ave. $950,000. H. L. Rowland, City Hall, engr.

Conn., Bridgeport—P. Brewster, dir. P. Wks., trunk sewer, Dewhirst St. from Thorme to Ruth Sts., incl. connections across Baker St. to Madison Ave. and Bretton St. $102,000. H. L. Rowland, City Hall, engr.

Conn., Norwalk—Sewerage Dpt., Smith St., preliminary survey disposal plant, East Norwalk. $45,000. W. Petrie, Smith St., East Norwalk, engr.

†Idaho, Boise — Federal Works Agency, Wash., D. C., sewage collection sys. for area adjacent to Army Air Base. $15,000.

†Ill., Rock Island—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., sewage disposal plant, Rock Island Arsenal. $300,000.

Ill., Moline—A. H. Arp, mayor, imprv. storm sewerage sys. downtown area, two 36 in. drains 15 St. $43,725. R. M. Benell, city engr.

Ia., Waterloo—K. Matthews, city clk., garbage grinding and conversion into gas sys. $125,000.

La., Natchitoches—Exten. sanitary sewerage sys. $125,000. Hawley & Freese, Capps Bldg., Fort Worth, Tex., engrs.

Mich., Ontonagan — Sewage disposal sys. $25,000. Dorothy G. Aubrey, city clk.

Minn., Minneapolis—Sanitary sewer, 60 St. between Nicollet and Portland Aves. $81,984.

Mo., Joplin—O. P. Mohaney, mayor, sanitary sewers. $30,000. U. W. Johnston, Joplin, engr.

N. J., Brant Beach—Long Beach Twp., Township Hall, sanitary sewers, manholes, Ocean Blvd., Hobart, Jeanette and Bayview Aves. $60,500. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

SEWERS, etc. (Proposed Work, Cont'd.)

†**N. J., Cape May**—4th Naval Dist., Navy Yard, Phila., Pa., drainage facilities, Naval Air Station. $53,200. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

★†**N. J., Fort Dix**—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., sewage treatment facilities, near here, Mt. Holly, Pemberton, etc. $520,000.

N. J., Hammonton—Atlantic Co., Courthouse, Atlantic City, drainage sys. various streets, $63,000. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Plainfield—Sanitary sewers, recaulking joints existing sewers. $61,400. WPA. J. H. Weitzen, Smith and Hobart Sts., Perth Amboy, WPA and owner's engr.

N. J., Trenton—Hamilton Twp., Twp. Hall, Greenwood Ave., vitr. clay sewers, house connections, Arbor Terrace, Hollywood and Bromley Sts. $63,528. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

N. Y., Lakewood—Busti Town Bd., G. Sales, clk., Lakewood, revised plans, specifications, sanitary sewer exten. into outlying sections Busti Twp. $50,000 or more. Hill & Hill, 24½ Main St., North East, Pa., engrs.

N. Y., Ogdensburg—Incinerator. Over $25,000.

★**N. Y., Rochester**—Dpt. P. Wks., City Hall, bids in July reconstructing 10 mi. conduit. $1,000,000. H. L. Howe, city engr.

O., Canton—Storm water sewers, various sections, Avon Pl. N.E., Fairmount Park Dist., Main Court and 2 St. S.E., N. Market Heights, 18 St. S.W. and Vega Court N.E. $422,309. J. A. Shisler, city engr.

O., Marion — Remodeling sewage disposal plant, sewer extens. $60,000. T. Cathers, city engr.

O., New Philadelphia — Bond election in August, relaying, exten. sewers. $100,000. A. Rosch, city engr. CD 11/14—ENR 11/21.

O., Port Clinton—Sewage disposal plant, sewer extens. $350,000. Champe-Finkbeiner & Assoc., Nicholas Bldg., Toledo, engrs. CD 2/25—ENR 2/27.

O., Steubenville—Sanitary sewers, Hollywood and Manhattan subdivisions. $51,000. J. K. McGinnis, city engr.

Okla., Goodwell—State Bd. Educ., A. L. Crable, supt., sewage and water sys., Panhandle A. & M. College. $27,223.

Okla., Langston—State Bd. Educ., A. L. Crable, supt., Oklahoma City, sewage plant, Langston University. $30,000.

Okla., Oklahoma City — Made preliminary plans sanitary outfall sewer, N. Georgia St. $65,000. R. Lee, City Hall, engr.

Okla., Oklahoma City — Made preliminary plans 27,000 ft. sanitary outfall sewer for N. Shartel and N. Walker Aves. $45,000. R. Lee, city engr.

Pa., Erie—M. J. Henry, city clk., 39 and 32 in. rein.-con. storm water sewer, vicinity 19 St. and Camphausen Ave. $25,000. A. N. Aitkin, city engr.

Pa., Hatboro—Boro Council, sewer exten., water lines, etc. to site aircraft plant and housing project. Over $40,000.

Pa., Indiana—Boro Council, sewage disposal plant. $150,000. Indiana State Teacher's College will share part of cost.

S. D., Brookings—C. B. Herreman, city aud., secondary settling tank for sewage disposal plant. $25,000. Dakota Eng. Co., 313 Western Bldg., Mitchell, engr.

Tex., Dallas—V. R. Smithman, city mgr., bids soon, sanitary sewer exten. in Brookdale Addn. and Braniff Hangar. $30,000. J. G. Rollins, dir. P. Wks.

Tex., Dalworth Park—W. B. Young, mayor, bond election soon, sanitary sewer imprvs., disposal plant, $40,000. CD 6/11.

Tex., Galveston—B. Harris, mayor, incinerator. $136,000.

Tex., San Antonio—C. K. Quinn, mayor, 400,000 ton incinerator. $375,000.

Utah, Spanish Fork—Exten. sanitary sewerage sys. $76,596. Caldwell & Richards, Templeton Bldg., Salt Lake City, engrs.

BIDS ASKED

Bids Asked July 1

Wis., Sheboygan — Sewage screening plant, connecting sewers, $35,000. A. L. Boley, city engr. CD 6/11—ENR 6/19.

Bids Asked July 8

Calif., Yountville—A. Boyd, state archt., P. Wks. Bldg., Sacramento, sewer lines, appurtenances, Veteran's Home. $25,000.

LOW BIDDERS

N. Y., Brooklyn—Dpt. P. Wks., Municipal Bldg., New York, June 17, Contr. 3, gas engines and generators, 26 Ward Sewage Treatment Works, from Rathbun Jones Eng. Co., 823 Spencer St., Toledo, O. **$292,000.** CD 6/3—ENR 6/5.

N. Y., Brooklyn—President Brooklyn Boro, Boro Hall, June 19, storm and sanitary sewers, Fillmore Ave., etc., from F. Valentino & Co., 5204 Snyder Ave. **$271,393.** CD 6/11.

Pa., Phila.—Dpt. P. Wks., Bureau Eng. City Hall Annex, June 16, sewers in Claridge St., from A. Di Sandro, 746 N. 25 St., **$38,331*****

sewers, Montour St. from P. Ventresca, 1450 Grange Ave., **$33,800*****sewage disposal plant from Acchione Constr. Co., 1607 McKean St., **$184,787.** CD 6/4—ENR 6/12.

†**Va., Fort Monroe**—Con. Q. M., June 6, incinerator, from Nichols Eng. & Research Corp., 60 Wall Tower, New York, N. Y., Items **(1) $28,975, (2) $27,290.** CD 5/20—ENR 5/22.

CONTRACTS AWARDED

Conn., Bridgeport—P. Brewster, dir. P. Wks., 3,200 ft. 15 in. trunk sewer line, Jennings Ave. trunk from E. Main and Huntington Turnpike to Mapledale Pl., booster pump. station, **WPA. $191,822.**

†**Ill., Fort Sheridan** — Con. Q.M., sewage treatment plant, to Santucci Constr. Co., Skokie. **$89,920.** Bids 5/29. CD 5/21.

†**Neb., Fort Crook**—U. S. Eng., 1709 Jackson St., Omaha, sewerage sys. and sewerage disposal plant, **WPA. $85,000.**

†**Neb., Omaha**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., drainage sys. on runway storm sewer, Fort Crook bomber plant, to Nebraska Culvert & Pipe Co., Wahoo. **$30,000.**

N. J., Newark—Sheeting, sanitary sewers, **WPA. $56,300.** J. Costello, city and WPA engr.

†**N. J., Pedricktown**—Fourth Naval Dist., Navy Yard, Phila., Pa., sewerage sys., Delaware Ordnance Depot. **WPA. $51,500.** CD 5/20—ENR 5/22.

N. Y., Rochester—Dpt. P. Wks., City Hall, sewer, Clarissa St. **WPA. $332,000.**

N. C., Landis—L. A. Corriher, mayor, sewerage sys. **WPA. $119,470.** CD 7/2—ENR 7/11.

Pa., Pittsburgh—F. M. Roessing, dir., City County Bldg., public sewer, West Run Rd., to Boquet Constr. Co., 333 Boquet St. **$25,000.** J. Croak, City County Bldg., co. engr.

Pa., York—F. H. Breneman, councilman in charge, sanitary and storm water sewer extens., 14 Ward site 350 dwelling housing, own forces. **$50,000.** C. F. W. Wallow, city engr. CD 5/7—ENR 5/15.

Tenn., Memphis—26 mi. sewerage sys. exten. Highland Ave. subdivision, Highland-Oakley, addn. to Avalon View, Chickasaw Woodlands, Churchill Circle, Goodland Court, Snowden-Pritchard-Bank of Commerce subdivision, **WPA. $207,185.** O. P. Williams, comr.

Tex., Corpus Christi — A. C. McCaughan, mayor, sewers, Westgate Heights, to J. W. France, Corpus Christi. **$32,000.** CD 3/13—ENR 3/20.

Tex., Fort Worth—Exten., imprv. sanitary sewerage sys. **WPA. $343,819.** Freese & Nichols, Capps Bldg., engrs.

Tex., Freeport—Sewerage sys. exten., sewage pumps, pump. station, etc., to J. G. Holland, 2739 Centenary St., Houston, **$43,798.** Bids 6/7. CD 6/4.

Wis., New Richmond—Exten. sanitary sewer and water sys. **WPA. $55,000.**

BRIDGES, GRADE CROSSINGS

PROPOSED WORK

Illinois—State Dpt. P. Wks. & Bldgs., Div. Hys., Springfield, overhead crossing over tracks Missouri Pacific and Gulf, Mobile and Ohio R. R. FA Route 132, Monroe Co.; overcrossing over main track N. Y. C. R. R. to replace existing grade crossing, FA Route 26, ½ mi. northeast of Kankakee; overcrossing over tracks C. B. & Q. R. R., FA Route 12, U. S. 40, Bond Co. E. Lieberman, Centennial Bldg., Springfield, engr.

Missouri—State Hy. Comn., Jefferson City, three 25 ft., rein.-con. slab span, over Drainage Ditch 1, Dist. 3, Route 60, FA 5-2, Sikeston-Poplar Bluff Rd., Scott Co.; four 40 ft., rein.-con. deck girder spans, over School Creek, Wheaton-Butterfield Rd., Route SW, FA 471 A1, Barry Co.; two 10 ft. rein.-con. slab spans, culvert type, over Muddy Creek, Route SE, FAS 135 A1, Hatfield Rd. E., Harrison Co.; two 10 ft., rein.-con. slab spans, culvert type over stream, Route SD, FAS 709 D1, Route 21, Gatewood Rd., Ripley Co.; one 20 ft., rein.-con. slab span culvert type bridge over Roger Branch, Buchanan Co. Rd. E., Route SNN, FAS 493 C1, Clinton Co.; three 25 ft. I-beam spans over north and south forks McGuire Branch, Buchanan Co. RD. E. Route SNN, FAS 493 C1, Clinton Co. C. W. Brown, Jefferson City, engr.

N. J., Atlantic City—Atlantic Co. Courthouse, reconstructing various bridges throughout county. $57,500. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Cranford—Bd. P. Utility Comn., State House, Trenton, grade crossing elimination by depressing Walnut Ave. under Lehigh Valley R. R. and carrying railroad over roadway. $170,000. C. A. Mead, 1060 Broad St., Newark, engr.

N. J., Totowa—Bd. Public Utility Comn., State House, Trenton, grade crossing elimination D. L. & W. R. R. on River View Dr., C. A. Mead, 1060 Broad St., Newark, engr.

N. Y., Eastchester (P. O. Tuckahoe)—Dpt. P. Wks., Westchester Co., White Plains, C. H. Sells, comr. P. Wks., reconstructing Harney Rd. Bridge. Over $25,000.

N. Y., Falconer—Chautauqua County Hy. Dpt., 454 N. Work St., 3 span, 214 ft. I-beam deck type bridge, Falconer-Frewsburg Co. Rd., near here. $25,000. W. B. Chilson, c/o owner, acting supt. county hys.

N. Y., New Rochelle—Westchester Co. Park Comn., County Bldg., White Plains, underpass, Hutchinson Circle. Over $25,000.

N. Y., Yonkers—Westchester Co., Cross Co. Park Revenue Project, County Office Bldg., White Plains, bids soon Loop bridge. Over $100,000. CD 10/31—ENR 11/7.

Oklahoma—State Hy. Dpt., Oklahoma City, preliminary plans, concrete, steel bridge across Indian Creek, on farm to market road north of Wyandotte, Ottawa Co. $45,000. V. T. Moon, engr.

Oregon—State Hy. Comm., Salem, rejected bids, June 12, Morrison St. bridge approaches, retaining walls, Harbor Dr. in Portland. CD 6/4.

Pa., Phila.—Dpt. Streets, City Hall, bridge, 70 St. from Elmwood Ave. to Tasker St. $100,000.

S. D., Deadwood—Viaduct over Red Creek. $70,000.

†**Washington**—Bureau Reclamation, Coulee Dam, relocating Napoleon bridge near junction Columbia and Kettle Rivers, moving 2 steel truss spans, 100 and 80 ft. long, new concrete piers, new approaches.

BIDS ASKED

Bids Asked June 30

N. Y., New York—President Manhattan Boro, Municipal Bldg., Battery Park underpass and Manhattan plaza connections for Brooklyn-Battery Tunnel, Contr. 51, for core borings, etc.

Bids Asked About July 1

Ind., Sommerset—Bd. Comrs., Wabash Co., Courthouse, rein.-con. bridge over Mississinewa River. $49,000. A. W. Gray, Courthouse, co. engr.

Bids Asked July 1

Massachusetts—Dpt. P. Wks., H. L. MacDonald, comr., Boston, reconstructing concrete, steel bridge over Boston Albany R.R., FAGM 25 A, in Pittsfield; concrete, steel bridge, FAGS 17 A (1), in Becket.

Mass., Northbridge—Dpt. P. Wks., H. L. MacDonald, comr., 100 Nashua St., Boston, Bean's crossing steel stringer bridge with concrete desk, FAGH 196 C (1). $120,000.

Va., Richmond—Dir. P. Wks., Richmond, guniting, repairing concrete masonry on Mayo Island Bridge.

Bids Asked July 2

Mass., Concord—Town, Dpt. Roads & Bridges, Town Hall, rigid frame rein.-con. bridge, concrete substructure, Pine St. Over $25,000. J. R. Worcester & Co., 79 Milk St., Boston, engrs.

Bids Asked July 8

Calif., San Diego—54,200 ft. 30 in. pipeline from University Heights to Upas St. $75,000. F. D. Pyle, City Hall, engr.

Bids Asked July 11

†**California**—Bureau Reclamation, Old Post Office Bldg., protection walls, paving Sacramento River bridge, first crossing, Southern Pacific R. R. relocation, Kennett Div. Central Valley Project, Spec. 969, adv. ENR 6/26.

Bids Asked About July 30

South Carolina—South Carolina Pub. Serv. Auth., T. B. Pearce, chn., Charleston, relocation railroad trestle, Atlantic Coast Line R.R. bridge in connection with Santee-Cooper tailrace canal near Pinopolis, $700,000. Harza Eng. Co., 27 Cumberland St., Charleston, engr. CD 5/26—ENR 5/28.

LOW BIDDERS

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, June 11, bridge, Humboldt Co., from R. A. Bell, 1615 Euclid Ave., San Marino. **$289,478.** CD 5/20—ENR 5/22.

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, June 18, rein.-con. viaduct, grading, paving, concrete and asphaltic concrete paving 0.4 mi. hy. between American River Bridge and North Sacramento, from H. W. Heple, 494 Delmas Ave., San Jose, **$528,136.** CD 5/27—ENR 6/5.

★**Illinois** — State Dpt. P. Wks. & Bldgs., Div. Hys., Springfield, June 13, superstructure Upper Illinois River Bridge, Peoria Co., from Strobel Constr. Co., 53 W. Jackson Blvd., Chicago, **$248,676*****fabrication, del. steel truss plate girder and I-beam superstructure for same bridge, Peoria Co., from American Bridge Co., 208 S. LaSalle St., Chicago. **$708,076.** Apple Creek Bridge, Greene Co., from A. P. Munsen, Marion, Ia. **$48,524.** CD 6/8.

Minnesota—State Hy. Dpt., St. Paul, June 6, Bridge 6313, St. Louis Co., from Polaris Concrete Products Co., 6010 Meding St., Duluth, Minn. **$157,923. (Correction**—bidders name and address.) CD 6/11—ENR 6/19, under LB.

Nebraska — State Dpt. Road & Irrigation, Lincoln, June 12, viaduct, Gretna Elkhorn Rd., from Dobson & Robinson, 823 1st Natl. Bank Bldg., Lincoln, and Abel Constr. Co., 900 N. 16 St., Lincoln, **$85,320; bridges**, Or-

BRIDGES, etc. (Low Bidders, Cont'd.)

leans-Arapahoe Rd., from Orshek & Christensen, Fremont, **$43,174.** CD 6/3—ENR 6/5.

New Jersey—E. D. Sterner, comr. State Hy. Dpt., Trenton, June 13, bridge, Gloucester Co., from E. H. Ellis, 912 Bway., Westville. **$67,250.** ***overpass, Bergen Co., from J. P. Burns, Knickerbocker Rd., Dumont. **$72,401.** CD 5/26—ENR 5/29.

★**New York**—A. W. Brandt, supt. P. Wks., Albany, June 18, painting North Grand Island Bridge over Niagara River, Erie and Niagara Counties, from Republic Structural Painting Corp., 185 Madison Ave., New York, **$37,053;** D.L. and W.R.R. grade crossing elimination Livingston Co., from Hornell Constr. Corp., Hornell, **$269,309***L.I.R.R. crossing elimination, Nassau Co., from E. W. Foley, Inc., 16 Court St., Brooklyn, **$272,591.** CD 6/2—ENR 6/5 under Roads.

Pennsylvania—State Hy. Dpt., at office I. L. Hughes, secy., Harrisburg, June 20, rein.-con. deck I-beam overpass bridge, etc, 3,961 ft. Lancaster Co., from Rice & Weidman, Box 1386, Lancaster, **$201,397;** 2 plate girder, and 4 rein.-con. bridges, surfacing 15,517 ft. hy. Montour Co. from B. G. Coon Constr. Co., 278 Union St., Luzerne, **$145,970.** CD 6/10—ENR 6/12.

South Carolina—State Hy. Dpt., Columbia, June 17, treated timber, rein.-con., structural steel bridge, Spartanburg Co., from D. M. Rickenbacker, Union, **$27,519***330 ft., rein.-con. bridge and 270 ft. rein.-con. bridge, Fairfield Co., from E. C. Bridges, Heath Springs, **$45,194***treated timber, rein.-con. structural steel bridge, Spartanburg Co. from J. W. Barnwell, Columbia, **$26,698.** CD 6/9—ENR 6/12.

†**Virginia** — Public Roads Administration, Winder bldg., Wash., D. C., Blue Ridge Parkway tunnel, from R. E. Mills, 325 W. 4 St., Frankfort, Ky., **$481,824.**

CONTRACTS AWARDED

Calif., Antioch—State, Div. Hys., P. Wks. Bldg., Sacramento, toll plaza at south approach to Antioch Bridge, incl. rein.-con. scale pits, scales, etc., to M. A. Jenkins, 3560 Bway., Sacramento, **$27,674.** Bids 6/18.

D. C., Wash. — District Comrs., District Bldg., grade separation, 14 St. and Main Ave. S.W., widening, replacement railroad trestles across Main Ave., to Leo Butler Co., 8416 Georgia Ave. **$248,996.** Bids 6/9, awarded 6/17. CD 5/21—ENR 5/29.

Ia., Waterloo—B. Banres, aud., Black Hawk Co., 2 bridges over Black Hawk Creek, to A. Olson Constr. Co., Waterloo, **$27,785.**

Massachusetts — Commonwealth of Massachusetts, Dpt. P. Wks., Boston, imprv. 12,270 sq.yd. and bridge FAP 120 E(2), Freetown, to J. Deveney & Co., 17 St. Ann St., Jamaica Plain (Boston). **$61,004.** Bids 5/27. CD 5/13—ENR 5/15.

Neb., Omaha—85 ft. underpass under Dodge St., at 22 St. **WPA. $77,896.** E. W. Woodbridge, city engr.

N. Y., Rochester—Dpt. P. Wks., City Hall, repairing 19 subway bridges, **WPA. $60,039.** R. G. Hoffman, dir. in charge. CD 4/4—ENR 4/10.

Ohio—State Hy. Dpt., Columbus, 0.249 mi. grade crossing elimination, Lake Co., to Lombardo Bros. Constr. Co., 1770 E. 11 St., Cleveland, **$244,217.** Est. $343,720. Bids 6/17. CD 6/6—ENR 6/12.

Pa., Reading—J. C. Bach, councilman in charge, repairs, etc. Front St. Bridge, to Whitaker & Diehl, Calder Bldg., Harrisburg. **$34,250.** Bids 6/11, awarded 6/12. CD 6/5.

R. I., Warren—State, Purch. Agt., Providence, Bridge 133, rein.-con. slab, stone on concrete abutments, timber piles, 59 ft. long, to Campanella & Cardi Constr. Co., 86 Weybosset St., Providence. **$37,920.**

STREETS AND ROADS

BIDS ASKED

Bidds Asked July 1

Maryland—State Roads Comn., Baltimore, grading, drainage, gravel base course surfacing, 0.502 mi. Colesville Rd., Contr. P. 285-1-550, Prince George Co.; 2.621 mi. Old Powder Factory Rd., Contr. P. 419-1-550, Prince George Co.; concrete shoulders 3.188 mi. Federalsburg-Bridgeville Rd., Contr. Co-154-211, Caroline Co.; grading, bituminous stabilization of approach to Dover Bridge over Dover Bridge Marsh, 0.788 mi. Contr. Co-155-1-211, Caroline Co.; concrete surfacing approaches to bridge over Leonards Mill Pond and along sect. hy. between Salisbury and Delamar, 0.502 mi. Contr. Wi-133-3-127, Wicomico Co.

Minn., Blue Earth—G. G. Buscho, aud., Faribault Co., grading State Aid Rd. 8 from west Faribault Co. line and east 8 mi. to Trunk Hy. 169. Over $25,000 (not official).

Minn., Austin—Mower Co., grading, surfacing, culverts, 11 mi. road imprvs., etc.

N. Y., New York—President Manhattan Boro, Municipal Bldg., Marginal St. imprv., E. 30 to E. 49 St., Contr. 36, paving Marginal St. from E. 30 to E. 38 Sts., etc.

★**Ohio**—State Hy. Dpt., Columbus, bituminous surface treatment 85.6 mi. S.H. 893, 731, 877, 213, 829, 263, 532, 579 and 170, Auglaize, Darke and Mercer Counties, $45,567; 55.98 mi. S.H. 636, 236, 756, 755, 579, 130, 593 156, 130, Auglaize and Logan Counties, $28,583; 45.38 mi. S.H. 173, 263, 831, 174, 136 and 659, Auglaize and Mercer Counties, $44,632; 45.43 mi. S.H. 922, 662, 731, 896, 181, 959, 567, 38 and 44, Butler, Hamilton and Preble Counties, $28,872; 60.38 mi. S.H. 27, 738, 846, 829, 217, 578 and 862, Champaign, Clark, Darke, Miami and Shelby Counties, $50,809; 57.63 mi. S.H. 472, 197, 194, 661, 595, 234, 172 and 579, Champaign, Clark, Logan and Shelby Counties, $37,137; 41.03 mi. S.H. 257, 452, 256, 125, 494, 972 and 8, Clermont Co.; 38.87 mi. S.H. 251, 195, 6, 248, 473, 472 and 29, Clinton, Green and Warren Counties, $25,772; 3.3 mi. Sect. K, S.H. 405, Lawrence Co., $8,039; 18.56 mi. S.H. 18, 516, 834, 486, 832 and 89, Mahoning Co., $39,743; 24.08 mi. S.H. 877, 215, 876, 28, 687, 664, 186 and 871, Montgomery and Preble Counties, $21,906; 40.31 mi. S.H. 460, 12, 648, 514, 474, 18 and 324, Portage Co., $39,603; 7.44 mi. S.H. 588, 17 and 76, Stark Co., $13,400; 19.44 mi. S.H. 648, 689, 721 and 93, Summit Co., $28,974; 38.29 mi. S.H. 650, 13, 329, 601, 35, 447, 35 and 648, Trumbull Co., $38,392; 45.56 mi. S.H. 603, 253, 451, 255 and 175, Clermont, Clinton and Warren Counties, $23,976; 42.64 mi. S.H. 19, 185, 904 and 252, Butler, Hamilton and Warren Counties, $18,685; 23.52 mi. S.H. 119, 7 and 30, Adams and Brown Counties, $12,877.

Pa., Pittsburgh—Comrs. Allegheny Co., R. G. Woodside, controller, paving, reconstucting, concrete and asphalt paving Park Ave., Braddock Twp.; relocating, widening 2 roads, Lowrie Run and Mt. Nebo Rd., Ohio Twp., rein.-con. paving Edgewood Ave., Edgewood; reconstructing Bridge 1, McLaughlin Rd., street paving and curbing Blvd. of the Allies, 2nd Ave. and Grant St. Levi Burd Duff, County Office Bldg., engr.

Virginia—Dpt. Hys., Richmond, concrete paving, bridge 3.4 mi. Route 60, S.P. S-356-FW2, GW1, AW1 and B1W, Warwick Co.; waterbound macadam paving 6 mi. Route 100, S.P. FA-754-A1S, C2S, Fed. Proj. FA-493-A(2), Pulaski and Wythe Counties; rein.-con. paving, stabilized base, 1.8 mi. Route 146, S.P. S-1221-D, E1, M1, Henrico Co.; grading, drainage, bridge, 2 mi. Route 26, S.P. S-1230-C2, B1, Charlotte and Halifax Counties; 192 ft. bridge, Route 122, S.P. S-678-B5, Franklin Co.

West Virginia—State Road Comn., Charleston, surface treating 5.2 mi. Beech Lick-Harrison Co. line Rd., S.P. 3453 B, Barbour Co.; 3.5 mi. Big Bend Creston Flats Rd., and 6.27 mi. Roane Co. line, Arnoldsburg Rd. and S.P. 3329, S.P. 1032 and 75; 10 mi. Dundon-Widen Secondary Rd., S.P. 5103, Clay Co.; 11.4 mi. W. Va. 16 at Susanna to Bradshaw Rd., S.P. 3650 A, McDowell Co.; gravel shoulders and hot mix asphaltic concrete surfacing 11.6 mi. Kanawha Co. line-Winfield Rd., S.P. 206-B 3299 and 3350, Putnam Co.; 3.3 mi. Paden City-Sisterville Rd., S.P. 3291 A, Tyler Co.; 9.19 mi. U.S. 52, from Mingo Co. line to McDowell Co. line Rd., S.P. 3128-A & B, Wyoming Co.

Bids Asked July 2

Arkansas—State Hy. Dpt., Little Rock, grading, minor drainage structures, gravel base course, 6.3 mi. Star City-Monticello Rd., Lincoln Co.

Md., Baltimore—Bd. Awards, City Hall, sheet asphalt paving Frederick Ave. from Yale to Monastery Aves., Contr. S.A. 751.

Pa., Allentown—G. W. Kistler, city clk., City Hall, curbing, paving about 4½ mi. Tremont, Allen, 29, Andrew, Early, Bird, Bulwer, Boone, Emmett, James, Webster, Blank, Richland, Mercer, Clifton, Hazel, Fountain, Silk, Pratt, Fair, Meyer and Howe Sts. $150,000. E. Meckley, city engr.

Bids Asked July 8

Wisconsin—State Hy. Comm., Madison, grading, draining, graded aggregate surfacing 2.654 mi. Gilman-Ingram Rd., Taylor Co.; 1.785 mi. S.T.H1 29, Athens S.T.H. 64 Road, Taylor and Marathon Counties, grading, draining, gravel surfacing 1.754 mi. Armstrong Creek Florence Rd., Fern-Keyes Lake Rd., Florence Co.

Wisconsin—State Hy. Comm., Madison, grading, draining, concrete surfacing 5.849 mi. Wisconsin Dells-Wisconsin Rapids Rd., Adams Co.; concrete surfacing 12.761 mi. Superior-Ashland Rd., Iron River-Ashland Rd., Bayfield Co.; grading, draining 0.926 mi. DeSoto-Genoa Rd., Vernon Co.; grading, draining, graded aggregate surfacing 4.441 mi. Neillsville-Pittsville Rd., Clark Co.; imprv. 9.344 mi. East Dubuque Hazel Green Rd., Grant Co.; Bridge 662, 36 ft. span timber trestle, Tomahawk River Bridge, approaches, Oneida Co.

Bids Asked July 9

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, grading, concrete paving, plantmix on crusher run surfacing, 4.4 mi. hy. Madera and Merced Counties; grading, bituminous surface treating 4.1 mi. Fresno and Madera Counties.

Kentucky—State Hy. Dpt., Frankfort, grading, draining, overhead over Lafayette Dr., Shelbyville-Frankfort Rd., Franklin Co.; high type surfacing 7.835 mi. Frankfort-Shelbyville Rd., Franklin and Shelby Counties; grading, draining, low type surfacing 2.327 mi. Lebanon-Danville Rd., Marion Co.; 6.4 mi. Lewisburg-Quality Rd., Logan Co.; medium type surfacing 7.764 mi. Shepherdsville-Taylorsville Rd., Spencer Co.; 4 mi. Hardinsburg-Leitchfield Rd., Breckenridge Co.; 4.458 mi. Lebanon Junction-Boston Rd., Bullitt and Nelson Counties; 4.244 mi. Grayson-Louisa Rd., Carter Co.; 3.35 mi. Owensboro-Pellyville Rd., Davies Co.; 6.139 mi. Mt. Carmel-Tolesboro Rd., Fleming and Lewis Counties; bituminous surfacing 14.41 mi. Lancaster-Nicholasville Rd., Garrard Co.; 14.727 mi. Vanceburg-Greenup Rd., Lewis Co.; 1.1 mi. Rockport Rd., Davies Co.; 5.428 mi. Williamstown-Crittenville Rd., Grant Co.; grading, draining 7.414 mi.

Louisiana—State Dpt. Hys., Baton Rouge, W. Prescott Foster, dir., approaches to Red River Bridge, Alexandria roadside improvt., etc., 0.903 mi. Routes 1, 5 and 6, S.P. 913-217, FAPs Nos. SN-FAP 378(2) and SN-FAP 22(3), Rapides Parish.

Bids Asked July 16

Del., Wilmington—State Hy. Dpt., Dover, W. W. Mack, ch. engr., driveways and streets for motor vehicle building, 8 and Bancroft Parkway, Contr. 790; adv. ENR 6/26.

Louisiana—State Dpt. Hys., Baton Rouge, W. Prescott Foster, dir., bituminous mixture for hot application (wearing course) 11.4 mi. DeSoto Parish Line-Shreveport Hy., Route 1, S. P. 913-04-61, bituminous surface treating 8.3 mi. Route 20, S. P. 913-04-65, Caspiana-Shreveport Hy., bituminous mixture for hot application 7 mi. Red River Parish Line-Caspiana Hy., Route 20, S. P. 913-04-76, all foregoing in Caddo Parish.

★**New York**—State Div., Hys., A. W. Brandt, supt. P. Wks., Albany, concrete paving 0.71 mi. W. and E. Main Sts., Fredonia Village, S.H. 9295, Fredonia-Silver Creek, Pt. 1, S.H. 5262 FARC 41-25, Chautauqua Co., $63,406; 2.97 mi. FARC 41-26, Deposit-Hales Eddy, S.H. 5045, S. N. 1055-A (1), Delaware Co. $228,301; 2.13 mi. FAS-RC 41-27, FAS SS 41-1, Philadelphia Vill., S. Main St., S.H. 1484, Philadelphia Pt. 3, S.H. 440, Philadelphia-Pine Camp, Jefferson Co., $118,459; 2.67 mi. FARC 41-28, Madison-Bridgewatr, Pt. 1, SH 8046 SN 72 (4) Oneida Co., $359,983; 7.03 mi. FARC 41-29 Syracuse-Watertown, S.H. 278, Central Sq-Union Sq., Pt. 1, S.H. 5250, Central Sq-Union Sq-Pt. 1, S.H. 5250, SN 148 (2), Oswego Co., $548,237; I-beam bridge, 0.42 mi. FARC 41-19 Crown Point-Port Henry, S.H. 841, Proj. 640-C(1), Essex Co., $57,153; Total est. $1,375,538.

Bids Asked

Missouri—State Hy. Comn., Jefferson City, rejected bids June 6, grading, concrete paving road from St. Louis to Airport, Route SMM, FAGH 573 B1, and bridge on same road, St. Louis Co. CD 5/28.

†**Oregon**—Public Roads Administration, 316 New Post Office Bldg., Portland, rejected bids June 11, imprv. Wasco Co. CD 6/3—ENR 6/5.

South Dakota—State Hy. Comn., Pierre, rejected bids June 10, imprv. SN FAP 15A(5), Lawrence Co.; FAP 123A(3) and SN FAP 163A(5), Butte and Lawrence Counties. CD 6/16—ENR 6/19, under LB.

Texas—B. P. Gentry, chn. State Hy. Comm., Austin, rejected bids Apr. 22, imprv. 1.916 mi. Donley Co. CD 4/14.

Texas—D. C. Greer, engr. State Hy. Dpt., Austin, will not receive bids June 27, imprv. 5.869 mi. Red River Co. CD 6/6—ENR 6/12.

LOW BIDDERS

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, imprv. 9.7 mi. Plumas Co., from L. J. Immel, Box 65, Sta. A, Berkeley, **$44,797.** CD 5/27.

California—C. H. Purcell, engr. State Hy. Dpt., P. Wks. Bldg., Sacramento, June 18, imprv. 9.9 mi. Siskiyou Co., from C. F. Fredericksen & Sons, Lower Lake, **$32,310.** CD 6/3—ENR 6/5.

†**Calif., San Bruno**—Con. Q.M., Fort Mason, San Francisco, June 17, roads, sidewalks, Golden Gate National Cemetery, from Carrico and Gautier, 365 Ocean Ave., San Francisco, **$90,471.** CD 5/11.

Delaware—State Hy. Dpt., Dover, June 19, imprv. 4.968 mi. Hy. Contr. 754, Sussex Co., from Short & Walls, Middletown, **$39,409.** CD 5/27—ENR 6/5.

D. C., Wash.—Dist. Comrs., District Bldg., June 13, repairing asphaltic pavements, concrete bases, from McGuire & Rolfe, Inc., 1401 First St. S. E. **$225,446.** CD 6/5.

D. C., Wash.—District Comrs., District Bldg., June 12, concrete paving, sidewalks, driveways, etc., from E. B. Donaldson & Brother, 12 St. and Brentwood Rd. N.E. **$93,938.** CD 6/5.

★**Illinois**—State Dpt. P. Wks. & Bldgs., Div. Hys., Springfield, June 13, imprv. 0.66 mi. Sangamon Co., from I. D. Lain Co., 410 S. 8 St., Springfield, **$89,986***2.22 mi. St. Clair Co., from Hoeffken Bros., 222 W. B St., Belleville **$125,937***1.7 mi. Will Co., from Chicago Heights Coal Co., 27 19 Pl., Chicago Heights, **$80,949***3.39 mi. Perry Co., from Lake Bros. Constr. Co., Effingham, **$40,962***1.72 mi. Scott Co., 3.9 mi. Edwards and Wayne Counties from Burch Constr. Co., Effingham, **$27,602** and **$96,286** respectively*** 1.11 mi. Macoupin Co and 0.78 mi. Bond Co., from Madison Constr. Co., Edwardsville, **$154,237** and **$120,962** respectively***0.35 mi. Cook Co., from Municipal Paving Co., Oak Park **$42,882***Penn. R. R. overhead bridge, Bond Co., from Parham Constr. Co., 17 Signal Hill Blvd., E. St. Louis, **$69,303***fabrication,

STREETS, etc. (Low Bidders, Cont'd.)

del. plate girder superstructure from Bethlehem Steel Co., Wrigley Bldg., Chicago $29,847. CD 6/9.

★**Maryland**—State Roads Comn., Baltimore, June 17, imprv. 2.122 mi. Charles Co., from C. J. Langenfelder & Sons, Rosedale, $199,262***1.933 mi. Contr. CE 226-1-450, Cecil Co., from T. Edgie Russell Co., Frederick, $45,388***0.836 mi. Contr. CE 243-411, Cecil Co. from John H. Ensey Co., 1619 Ridgely St., Baltimore, $34,878***1.047 mi. Washington Co., from F. Carozza, 24444 N. Charles St., Baltimore, $326,346. CD 6/10 and 6/11.

Md., Baltimore—Bd. Awards, City Hall, June 18, imprv. Frederick Ave., Contr. S. A. 750, from American Paving & Constr. Co., 2525 Loch Raven Blvd., $51,910. CD 6/11.

Michigan—State Hy. Dpt., Escanaba, imprv. 2.549 mi. hy. Mackinac Co., from C. G. Bridges, Escanaba, $108,601***11.035 mi. Houghton Co., from Thornton Constr. Co., 101 Quincy St., Hancock, $63,474***4.051 mi. Chippewa Co., from Michigan Asphalt Paving Co., 720 E. Ten Mile Rd., Royal Oak, $58,563. CD 6/11.

★**Michigan**—State Hy. Dpt., Lansing, June 18, imprv. 6.537 mi. Charlevoix Co., from Marsman & Taber, 415 Murray Bldg., Grand Rapids, $44,420***0.909 mi. Van Buren Co. and 0.758 mi. bridge approaches, Osceola Co., from E. Closser, 11624 Winthrop Ave., Detroit, $69,729 and $32,027 respectively***1.926 mi. Van Buren Co., from W. Pierson, 2236 Delaware Blvd., Saginaw, $53,228***3.01 mi. Kent Co., from P. C. Miller, Sparta, $63,751***3.074 mi. Kalamazoo Co., from Globe Constr. Co., 462 Portage St., Kalamazoo, $70,538***3.02 mi. Ingham Co., from R. Sablain, 2935 S. Cedar St., Lansing, $57,341***6.229 mi. Crawford Co., from A. W. Hodgkiss Co., Box 311, Petoskey, $87,078***5.6 mi. Bay Co., from Midland Contg. Co., 204 W. Main St., Midland, $55,730. CD 6/11.

†**Mich., Battle Creek**—Con. Q.M., Fort Custer, road imprvs., 6.3 mi. gravel surfacing, from Louis Gravaglia Co., 4514 Burns Ave., Detroit, $230,000.

★**Nebraska**—State Dpt. Roads & Irrigation, Lincoln, June 12, from Dobson & Robinson, 823 1st Natl. Bank Bldg., Lincoln and Abel Constr. Co., 900 N. 16 St., Lincoln, imprv. 8.8 mi. Seward-Lincoln Rd. $217,626; 1.4 mi. Gretna-Elkhorn Rd. $76,758; 7.6 mi. Seward-Lincoln Rd., $198,020***from H. W. Johnson, Sioux City Ia., 9 mi. Pierce-Harder-Norfolk Rd. $37,295***from Bushman Constr. Co., 1801 S. 8 St., St. Joseph, Mo., 2.7 mi. Arapahoe-South Rd. $172,418***from Roberts Constr. Co., 1018 Terminal Bldg., Lincoln, 4.6 mi. Orleans-Arapahoe Rd. $38,718***from Thelsen Bros. Osmond 12 mi. David City-Schuyler Rd. $37,282; grading 11.1 mi. Fairmont-York Rd. $51,161***from M. M. Liggett, 3015 Plymouth St., Lincoln, graveling 11.1 mi. Fairmont-York Rd., $26,897. CD 6/3—ENR 6/5.

New Jersey—E. D. Sterner, comr. State Hy. Dpt., Trenton, June 13, imprv. 3.816 mi. Monmouth Co., from General Contg. Co., 225 Passaic Ave., Belleville. $216,717. Rejected bids June 13, imprv. 2.84 mi. Hunterdon Co.

New York—A. W. Brandt, supt. P. Wks., Albany, June 18, imprv. 1.25 Mi. Cayuga Co., from Mohawk Paving Co. Inc., Buffalo, $95,-209***0.25 mi. Seneca Co., from Kroe Constr. Co., Inc., Rochester, $27,660***0.21 mi. Schenectady Co., from Fitzgerald Bros. Constr. Co., Proctor Bldg., Troy, $100,185***3.88 mi. Jefferson Co., from Bero Eng. & Constr. Corp., 272 Vandervoort St., North Tonawanda, $221,195. CD 6/2—ENR 6/5.

Ohio—State Hy. Dpt., Columbus, June 17, imprv. 2.405 mi. Columbiana Co., from Ohio Road Imprv. Co., Chamber of Commerce Bldg., Columbus, $39,722, est. $39,850; 1.851 mi. Jefferson Co. from Tri State Asphalt Corp., South Broadway, Martins Ferry, $40,-500. CD 6/6—ENR 6/12.

★**Pennsylvania**—State Hy. Dpt., J. L. Hughes, secy., Harrisburg, June 20, imprv. 27.023 ft. hy., 5 rein.-conc. structures, Somerset and Westmoreland Counties, from A. Eidemiller, Greensburg. $529,365. CD 6/10—ENR 6/12.

Pennsylvania—State Hy. Dpt., Harrisburg, June 20, imprv. 6,041 ft. Montgomery Co., from J. J. Skelly, Media, $59,921***5,048 ft. Luzerne Co., from C. F. Goeringer Constr. Co., 55 S. Washington St., Wilkes-Barre, $27,837***20,600 ft. Erie and Crawford Counties, from Mayer Bros. Constr. Co., 1227 W. 18 St., Erie, $90,316***700 ft. York Co., from Conestoga Constr. Co., Lancaster, $29,754*** 1,467 ft. Venango Co., from B. Ferrari, 209 Ligonier St., Latrobe, $97,213. CD 6/10—ENR 6/12.

South Carolina—State Hy. Dpt., Columbia, June 17, imprv. 2.776 mi Laurens and Spartanburg Co., from Kiker & Yount, Reidsville, $54,322; 8.4 mi. Sumter Co., from Carolina Contg. Co., Columbia, $235,714. CD 6/9—ENR 6/12.

★**Wisconsin** — State Hy. Comm., Madison, from Streu Constr. Co., Two Rivers, imprv. 0.834 mi. Door Co., $38,412; 9.678 mi. LaCrosse and Monroe Counties, $233,016; 11.077 mi. Grant Co., $246,420***from Jaeger Bros., West Bend, 6.203 mi. Washington Co., $127,179; 4.517 mi. Washington Co., $110,612***from A. J. Pagel, Almond, 5.908 mi. Portage Co., $122,-519***from A. W. Gallagher & Son, Madison, 5.066 mi. Portage and Marathon Counties, $162,414 *** from L. G. Arnold, Inc., Eau Claire, 2.654 mi. Taylor Co., $56,351***from C. & J. Theiler, Tomahawk, 1.785 mi. Taylor and Marathon Counties, $37,887 *** from A. H. Prksch, Iron River, Mich., 1.754 mi. Florence Co., $42,547***from J. O'Keefe, Jr., DePere, 3.398 mi. Oneida Co., $53,126***from E. A. Sturmer, LaCrosse, 2.15 mi. Crawford Co., $36,-606***from J. P. Humphries, 2959 N. Downer St., Milwaukee, 14.261 Iowa Co., $112,501; 8.821 mi. Grant Co., $83,264***from O. Wiesner, Superior, 7.596 mi. Dunn Co., $83,276. CD 5/29—ENR 6/5.

CONTRACTS AWARDED.

Calif., Alameda—Asphaltic concrete paving, sewers, Webster St., to Heafey-Moore Co., 344 High St., Oakland, $82,958. Est. $110,000. Bids 6/17. CD 6/11.

Calif., Watsonville—Imprv. Main St., to W. J. Wilkinson and H. B. Scott, Box 900, Watsonville. $133,473. Bids 6/10. CD 5/26—ENR 5/29.

Ia., Logan—Harrison Co., grading secondary roads, to Wilbur Nielsen, Onawa, $25,000.

Maine—State Hy. Comn., L. D. Barrows, ch. engr., Augusta, imprv. 1 mi. Bucksport, to T. Di Cenzo, 67 Lincoln St., Calais, $50,695; 2.37 mi. Greene and Leeds, to Chas. E. Horne, 156 Main St., Millbury, Mass., $78,978. Bids 6/11. CD 6/4.

Maine—State Hy. Comn., Augusta, to Bridge Constr. Corp., 335 Water St., Augusta, concrete surfacing 1.06 mi. Saco, $52,404; bituminous macadam surfacing 2.87 mi. Berwick and North Berwick, $91,460; gravel surfacing 1.31 mi. Wilton, $58,627; 1.5 mi. Guilford and Dover-Foxcroft, $33,582***to W. H. Hinman Co., Norridgewock Ave., Skowhegan, bituminous macadam surfacing 3.82 mi. Bridgewater, $171,447***to H. Sargent, Bennock St., Stillwater, gravel surfacing 2.43 mi. Passadumkeag and Greenbush, $69,310. Grand total $476,830. Bids 6/4.

†**Md., Baltimore**—Farm Security Administration, Dpt. Agriculture, Wash., D. C., roads, walks, utility services, to Lawrence & Shamer, 2503 N. Charles St. $26,500.

Minnesota—State Hy. Dpt., St. Paul, imprv. 7 mi. AFE 42, Cromwell, to P. C. Roth & Son, Brainerd, $25,154; 4.26 mi. AFE 39 and 6.55 mi. and AFE 40, to Duininck Bros. & Gilchrist, Olivia, $25,917. Bids 6/6. CD 5/21—ENR 5/29.

Mississippi—State Hy. Comn., Jackson, imprv. 0.567 mi. Yazoo Co., to E. O. Korsmo Constr. Co., Porter Bldg., Memphis, Tenn. $98,735. Est. $60,000. Bids 6/10, awarded 6/12. CD 6/16—ENR 6/19.

Missouri — State Hy. Comn., Jefferson City, imprv. 4.033 mi. Audrain Co., to W. J. Menefee Constr. Co., Sedalia, $28,513. Bids 6/6. State Hy. Comn., Jefferson City, rejected bids 6/6, imprv. 3.432 mi. St. Louis-Hannibal Rd., Route 61, FA 316 E2, FA 316 A2, and 316 F2, all Lincoln Co. CD 5/28.

Neb., Omaha—Widening, repaving 30 St. WPA. $200,000. E. W. Woodbridge, city engr.

N. J., Elizabeth—Grading, penetration macadam paving. WPA. $51,054. J. H. Weitzen, Smith and Hobart Sts., Perth Amboy, WPA and owner's engr.

N. J., Jersey City—Hudson Co., Courthouse, grading, sidewalks. WPA. $55,000. F. Radigan, Courthouse, Jersey City, co. and WPA engr.

N. J., Laurel Springs—Boro, grading excavating, bituminous penetration macadam surfacing East Atlantic Ave. Sect. 1, WPA. $62,637. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Montclair—Grading, removing existing penetration paving, curbing, drainage, etc. streets. WPA. $59,000. J. B. Hayden, Town Hall, town and WPA engr.

N. J., Newark—Street Dpt., City Hall, grading, bituminous on concrete surfacing, Raymond Blvd. WPA. $53,500. G. Andress, City Hall, city and WPA engr.

N. J., North Bergen—Grading, excavating, concrete sidewalks. WPA. $59,000. J. Muss, Town Hall, WPA and owner's engr.

N. J., New Brunswick—Middlesex Co., Courthouse, grading, permanent paving, surface treated paving, curbing, guttering, rubble guttering roads, WPA. $82,087. J. H. Weitzen, Smith and Hobart Sts., Perth Amboy, WPA and owners' engr.

N. J., Phillipsburg—Warren Co., Court, house, grading, drainage, paving, imprv. roads. WPA. $53,971. J. F. Sheehan, foot of 5 Ave., Paterson, WPA and owner's engr.

New York—Dpt. Pub. Wks., Albany, surfacing, widening 7 mi. State Highways near Ellenville and Napanoch, own forces. Over $25,000.

N. Y., Olean—Bituminous materials paving, West River Rd., Seneca Ave., Washington, S. 20 and Wayne Sts., own forces. $27,290. C. H. Weatherell, Jr., City Hall, engr.

N. Y., Rochester—Hy. Dpt. Monroe Co., Rochester, paving, imprv. roads. WPA. $265,900. R. G. Hoffman, dir. in charge.

N. Y., Syracuse—Dpt. P. Wks., City Hall, asphalt paving 42,000 sq. yd. streets under Delaware, Lackawanna & Western R.R. underpass. WPA. $75,000. N. Pitts, city engr.

N. Y., Yonkers—Dpt. P. Wks., City Hall, resurfacing Larkin Plaza, McLean Ave., Chatfield Rd., etc. WPA. $50,000.

N. C., Burlington—E. H. Horner, mayor, imprv. streets, WPA. $79,002. A. C. Linberg, city engr.

★**Ohio**—State Hy. Dpt., Columbus, imprv. 1.321 mi. Wayne Co., to W. H. Ringwold & Sons, Purdy & Herring, 200 E. Longview Ave., Mansfield, $347,493, est. $177,000***1.549 mi. VanWert Co., to R. R. Heffner & Son, 222 Fulton St., Celina, $46,917 est. $51,800*** 4.41 mi. Stark Co., to McCourt Constr. Co. 1000 Hazel St. Akron, $80,787 est. $86,800*** 0.151 mi. Putnam Co., to C. R. Boulton, 10 E. Town St., Columbus, $50,172 est. $58,250*** 1.832 mi. Franklin Co., to B. F. Patterson, 4476 N. High St., Columbus, $107,002 est. $129,100***4.7 mi. Darke Co., to Bowsman Washed Sand & Gravel Co., P. O. Box 506, Troy, $132,929 est. $137,800***13.978 mi. Ashland Co., to Mansfield Asphalt Paving Co., 153 Orange St., Mansfield, $147,549 est. $150,-800. Grand total $912,849. Bids 6/17. Cancelled bids to have been opened June 17, imprv. 0.105 mi. Trumbull Co. CD 6/6—ENR 6/12.

O., Elyria—Bd. Comrs. Lorain Co., surface treating roads, to H. J. Hart, Oberlin Rd., Elyria, $56,919. Bids 6/10. D. E. Patterson, co. engr.

Oregon—State Hy. Comn., Salem, imprv. 7.79 mi. Union Co., to Norris Bros., Burlington, $48,252***grading 1.48 mi. road bed topping 4.39 mi. surfacing 5.03 mi. and bituminous macadam paving 4.38 mi. Klamath Co. to F. Penepacker, 400 N. Thompson St., Portland, and C. A. Dunn, Klamath Falls, $172,016***grading 4.25 mi. and surfacing, oiling 6.29 mi. Sherman Co., to Leonard & Slate, Multnomah, $52,707. Grand total $272,975. Bids 6/13. Rejected bids June 13, imprv. 2.22 mi. Union Co. CD 6/4.

★**Oregon**—State Hy. Comm., Salem, imprv. 2.78 mi. Union Co., to Leonard & Slate, Multnomah $86,611***3.75 mi. Tillamook Co., to C. J. Eldon, 2525 NE 15 Ave., Portland, $73,356***4.7 mi Josephine Co., to F. Penepacker, 400 N. Thompson St., Portland, $313,317***grading 1.95 mi. and surfacing, oiling 3.15 mi. Hood River Co., to Rodgers Constr. Co., Dayton, Wash., $51,858. Grand total $525,142. Bids 6/13. Rejected bids June 13, surfacing 6.91 and grading 2.84 mi. Lake Co. CD 6/4.

Pa., Blairsville — Supervs. Burrell Twp., Blairsville, grading, stone base, bituminous materials paving twp. roads, own forces. $25,250.

Pa., Greensburg—Comrs. Westmoreland Co., resurfacing roads and bridges, to Burrell Constr. & Supply Co., foot of 5 St., New Kensington. Est. $52,000.

Pa., Pittsburgh—Allegheny Co., Courthouse, concrete paving 1,000 ft. Bethel Rd., Washington Branch, Bethel Twp. to M. F. Gerboldt, 404 Parallel St. $24,971. L. B. Duff, County Office Bldg., engr.

Pa., Scranton—Dpt. P. Wks., W. Schunk, dir., City Hall, repairs, repaving, etc., streets and bridges, own forces. $46,000. F. K. Derby, city engr.

Tenn., Savannah—E. E. Mabry, Judge Hardin Co., farm to market roads, WPA. $94,231.

Tenn., Trenton—C. E. Snyder, judge, Crockett Co., imprv. rural roads. WPA. $77,-964.

Tex., Austin—Travis Co., J. A. Belger, aud., resurfacing roads, to C. H. Strain, San Angelo, $39,220. Est. $40,000. M. O. Metcalfe, Courthouse, engr.

Tex., Austin—Travis Co., grading, embankments, paving, WPA. $108,840.

Tex., Corpus Christi—A. C. McCaughan, mayor, street paving, to Fletcher & Co., Corpus Christi, $38,200. CD 3/13—ENR 3/20.

Vermont—State Hy. Dpt., H. E. Sargent, ch. engr., Montpelier, grading, draining, double tack coat refined tar 2 mi. Route 12, Calais, to B. A. Simone, 107 Century St., Medford, Mass., $62,083.

★**Washington** — J. A. Davis, acting dir. Hys., Olympia, imprv. 2.09 mi. Kitsap Co., to Goetz and Brennan, Seattle, $384,200*** 5.5 mi. Stevens Co., to R. L. Bair, 1220 Ide St., Spokane, $118,854***5.2 mi. Stevens Co. and 13.5 mi. Spokane and Lincoln Counties, to F. R. Hewett, Parkwater St., Spokane, $49,921 and $42,052 respectively. Grand total $595,027. Bids 6/10. Rejected bids June 10, imprv. 46.8 mi. Kittatas, Yakima and Franklin Counties, and stockpiling mineral aggregates, Grant and Douglas Counties. Will readvertise. CD 5/28.

†**Wash., Fort Lewis**—Con. Q.M., clearing, grubbing, grading, WPA. $143,000.

West Virginia—State Road Comm., Charleston, imprv. FA 306-B, Jackson Co., to Keeley Constr. Co., Clarksburg, $207,337,. FA 158 G(3) 56(2) 56B(1) and 15 (2), Jackson Co., to Smith Constr. Co., Huntington, $133,437. Bids 6/17. CD 6/5—ENR 6/12.

Wisconsin—State Hy. Comm., Madison, imprv. 9.186 mi. Richland Co., to William Conway, 2105 Jefferson St., Madison, $210,746. Bids 6/17. Rejected bids June 17, imprv. 2.654 mi. Taylor Co., 1.785 mi. Taylor and Marathon Counties, 1.754 mi. Florence Co. CD 6/19—ENR 6/5.

EARTHWORK, WATERWAYS

PROPOSED WORK

†Calif., Fort Baker—U. S. Eng., 401 Customhouse, San Francisco, completed plans boat basin.

Calif., San Jose—South Santa Clara Water Conservation Dist., construction to impound Llagas Creek waters, with conservation dam. $240,000.

Ia., Muscatine—First Iowa Hydro-Electric Co-operative, Muscatine dam on Cedar River, 8 mi. canal to divert water from 72,000 acre reservoir on Cedar River to Mississippi River and powerhouse on Mississippi River.

†Mass., Lowell—U. S. Eng., Park Square Bldg., Boston, flood control project, 2 dikes, 2 pump. stations, Merrimack River. CD 2/14—ENR 3/20.

†Neb., Nebraska City—U. S. Eng., 1709 Jackson St., Omaha, dredging 104,200 cu.yd. earth, Civil Bend for pilot canal. $18,000.

N. J., Atlantic City—Atlantic Co., Courthouse, grading banks, excavating, clearing out various streams. $35,000. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Elk—Cleaning out, excavating, grading banks various streams. $35,000. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

†N. J., Fort Dix—War Dpt., 20 St. and Constitution Ave., N.W., Wash., D. C., excavating, grading corrugated iron pipe, etc., $51,500. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

†N. Y., Mt. Morris—U. S. Eng., 540 Federal Bldg., Buffalo, flood control reservoir project in Genesee River.

†O., Lorain—U. E. Eng., Federal Bldg., Buffalo, N. Y., turning basin 20 ft. deep in Black River near B. & O. R.R. tracks. $30,000.

★**†Tex., Denison**—U. S. Eng., Cotton Exch. Bldg., Dallas, Denison Red River Dam, excav. and rolled earth embankment work. $8,100,000.

†Washington — U. S. Eng., Pittock Blk., Portland, Ore., maintenance dredging Cowlitz River. $20,000.

†Washington — Bureau Reclamation, Coulee Dam, pump. plant to pump water from Columbia River to irrigate 15,000 acres in Pasco, etc., and dam in Frenchman Hills area.

†Washington — U. S. Eng., Pittock Blk., Portland, Ore., maintenance dredging, Elokomin Slough. $5,000.

†Washington—U. S. Eng., Pittock Blk., Portland, Ore., maintenance dredging Lewis River. $6,000.

†Wash., Bakers Bay—U. S. Eng., 628 Pittock Blk., Portland, Ore., maintenance dredging Columbia River.

BIDS ASKED

Bids Asked July 1

Mass., Tisbury—Dpt. P. Wks., H. L. MacDonald, comr., 100 Nashua St., Boston, dredging 14,000 cu. yd. Vineyard Haven Harbor. $15,000.

Bids Asked July 2

†Ky., Henderson—U. S. Eng., Louisville, dredging upper approach to Dam 28, Ohio River.

Ont., Toronto—Secy. Dept. P. Wks., Ottawa, reconstructing portions breakwater exten. to South Pier, western channel, Toronto Harbour, $25,000. K. M. Cameron, c/o owner, engr.

Bids Asked July 3

†Utah — Bureau Reclamation, Provo, furnishing, del., sand, gravel, for Deer Creek Dam, Weber-Provo Diversion Canal and Provo Reservoir Canal, Provo River Project, Spec. 1523-D.

Bids Asked July 8

†Colorado — Bureau Reclamation, Customhouse, Denver, furnishing, del., high pressure gate assembly for installation in gate chamber outlet works, Jackson Gulch Dam, Mancos Project, Spec. 1524-D.

†Ky., Jamestown—U. S. Eng., Nashville, Tenn., dam, appurtenant works, Wolf Creek, extended date; adv. ENR 6/26. CD 6/9—ENR 6/12.

Bids Asked July 9

†Arizona-California-Nevada—Bureau Reclamation, Boulder City, Nev., structural-glass and travertine work for exhibit building, Boulder Dam, Boulder Canyon Project, Spec. 1521-D.

Calif., Sunol—P. Utilities Comn., City Hall, concrete, welded steel pipe laterals for Sunol Irrigation Sys., Alameda Co., Spec. 300. Over $15,000.

†Texas—U. S. Eng., Federal Bldg., Galveston, dredging 130,000 cu. yd., Port Bolivar Turning Basin.

†Washington — Bureau Reclamation, Cushouse, Denver, Colo., unity-power-factor, vertical-shaft, alternating current generators for Grand Coulee Power Plant, Columbia Basin Project, Spec. 967.

Bids Asked July 10

†California — Bureau Reclamation, Denver, Colo., electric elevator in Parker power plant, Parker Dam power project, Spec. 1522-D.

†California—Bureau Reclamation, Customhouse, Denver, Colo., furnishing, del. steel pipe, fittings for water supply lines for Southern Pacific R.R. Relocation, Central Valley Project, Spec. 1525-D.

South Carolina—South Carolina Pub. Serv. Auth., Charleston, furnishing 4 sets lightning arresters and oil circuit breaker for Santee Cooper Project. Harza Eng. Co., 27 Cumberland St., Charleston, engr.; adv. ENR 6/26.

Bids Asked July 11

†California—Bureau Reclamation, Old Post Office Bldg., Sacramento, protection walls, paving, Sacramento River Bridge, first crossing, Southern Pacific R.R. relocation, Kennett Div., Central Valley Project, near Redding, Spec. 969.

†California—Bureau Reclamation, Customhouse, Denver, Colo., furnishing, del. welded plate steel, water pressure tanks and oil pressure tanks for Shasta Power Plant, Central Valley Project, Spec. 1514D.

Bids Asked July 14

†California—Bureau Reclamation, Old Post Office Bldg., Sacramento, Keswick Dam, Kennett Div. Central Valley Project, near Redding, Spec. 960; adv. ENR 6/26.

†California—Bureau Reclamation, Old Post Office Bldg., Sacramento, earthwork, structures, Battle Creek Rd. migratory fish control, Kennett Div. Central Valley Project, Spec. 970; adv. ENR 6/26.

†California—Bureau Reclamation, Old Post Office Bldg., Sacramento, combination stations, four-room dwellings, section houses, tool houses, woodsheds, Southern Pacific R. R. relocation, Kennett Div. Central Valley Projetc., Spec. 968; adv. ENR 6/26.

†California—Bureau Reclamation, Customhouse, Denver, Colo., furnishing, del. ventilating equip. in Shasta Power Plant, Central Valley Project. Spec. 1527-D.

†Maryland—U. S. Eng., 332 Post Office Bldg., Baltimore, dredging place measurement from Middle River and Dark Head Creek; adv. ENR 6/26.

Bids Asked July 16

†Mass., Lowell—U. S. Eng., Park Square Bldg., Boston, flood protection Merrimac River. CD 6/16—ENR 6/19.

Bids Asked July 18

†New Jersey—U. S. Eng., 17 Battery Pl., New York, N. Y., dredging 366,000 cu. yd. material except ledge rock from South River; adv. ENR 6/26.

Bids Asked July 24

†Indiana—U. S. Eng., P. O. Box 59, Louisville, flood protection works East Sect. Unit 1, Jeffersonville, Clark Co.; adv. ENR 6/26.

Bids Asked July 30

†California—Bureau Reclamation, Customhouse, Denver, Colo., furnishing, del. conduit linings, etc., for installation in river outlets at Shasta Dam, Central Valley Project, Spec. 971.

Bids Asked

†Ill., Morris—U. S. Eng., P. O. Bldg., Chicago, reconstructing upper approach wall. Dresden Island lock and dam.

LOW BIDDERS

Calif., Sunol—P. Utilities Comn., City Hall, June 17, supply pipe line and furnishing, installing 2 steel water tanks for Sunol Irrigation and Domestic Water Supply systems, near here, WD 296, from M. J. Lynch, Bernevald and Oakdale Sts., San Francisco. $21,170. CD 6/3—ENR 6/5.

†Louisiana—U. S. Eng., foot of Prytania St., New Orleans, June 19, excavating approx. 1,475,000 cu.yd. earth in landside borrow pit enlargement Lottie to Bayou Maringouin, from T. L. James & Co., Inc., Ruston, at 5.5c. per cu.yd., total $81,825. CD 6/3—ENR 6/5.

†New Jersey—U. S. Eng., 17 Battery Pl., New York, N. Y., June 17, dredging 511,100 cu. yd. from Sandy Hook Bay Anchorage, from Hill Dredging Co., 5601 Atlantic Ave., Ventnor. $72,832. CD 5/20—ENR 5/22.

†Tex., Rockport—U. S. Eng., Federal Bldg., Galveston, June 12, dredging 165,000 cu. yd. channel Louisiana-Texas Intracoastal Waterway, Aransas Co., from Bauer & Smith, Port Lavaca. $33,000. CD 5/27—ENR 6/5.

★**†W. Va., Huntington**—U. S. Eng., Federal Bldg., June 17, earth levees, rein.-con. walls, Pats branch pump. station, appurtenant works, on Huntington flood protection project, Sect. 3, from Midwest Constr. and Asphalt Co., 221 N. LaSalle St., Chicago, Ill., $1,608,575.. CD 5/20—ENR 5/22.

CONTRACTS AWARDED

Calif., Camarillo—State, Div. Architecture, Sacramento, June 17, grading, fill, excav., roadwork, dams, levees, drainage channels, concrete bridge, etc., Camarillo State Hospital, from A. S. Vinnell Co., 1100 Westminster Ave., Alhambra, and Contracting Engineers Co., 2310½ W. Vernon Ave., Los Angeles. $265,159. CD 6/3—ENR 6/5.

†Ga., Columbus—Con. Q.M., Fort Benning, dam on Upatoi Creek, to Schley Gordy, Hill Bldg. $58,800. CD 4/30.

†Mass., West Springfield—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., pump. station, flood control project, Warren St., to J. G. Roy & Sons Co., 21 Sil[illegible]r St., Springfield. $74,103. Bids 6/17. CD 6/3—ENR 6/5.

†Neb., Nebraska City—U. S. Eng., 170[illegible] Jackson St., Omaha, excavating 140,200 [illegible] yd. earth from channel Missouri River, hire labor and Govt. plant. $18,000. CD 6/13—ENR 6/19.

N. J., Long Branch—Bd. Commerce & Navigation, 1060 Broad St., Newark, bu[illegible]head, Atlantic Ocean. WPA. $230,520. CD 4/9—ENR 4/17.

†Ohio—U. S. Eng., Detroit, Mich., dredging Lorain Harbor mouth Black Ri[illegible]r, to Dunbar & Sullivan Dredging Co., 231[illegible] Buhl Bldg., Detroit, Mich. $24,222.

†Tex., San Antonio—U. S. Eng., Federal Bldg., Galveston, rock riprapping channels, Randolph Field. WPA. $62,445.

†Wash., Odair—Bureau Reclamation, Coulee Dam, tunnel supports for Grand Coulee Dam, Columbia Basin Project, to Commercial Shearing & Stamping Co., 1775 Logan St., Youngstown, O. $49,963.

UNCLASSIFIED

PROPOSED WORK

Ariz., Mesa — AIRFIELD — Southwest Airways, Inc., Glendale, airfield. $350,000.

★**†Ark., Hope**—PROVING GROUND, etc.—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., for Southwestern Proving Ground and airport, $15,000,000. Howard, Needles, Tammen & Bergendoff, 55 Liberty St., New York, N. Y., engrs. CD 6/20.

Calif., Lancaster — AIRPORT — Lancaster Irrigation Dist., airport, paved runways, near here. $350,000. Parkinson & Parkinson, Title Insurance Bldg., Los Angeles, archts. E. L. Eillingwood, 124 W. 4 St., Los Angeles, engr.

★**Calif., Los Angeles** — SHIPBUILDING PLANT—Consolidated Steel Corp., 5700 S. Eastern Ave., applied for lease of 90 acre site to build 8 way shipbuilding plant, west basin, Los Angeles Harbor, Frigate St., 13 St. to waterfront. $4,000,000.

Illinois and **Indiana** — PIPE LINE — Ray Phebus, et al, Centralia, Ill., 8 mi. natural gas pipe line from Russellville, Ill. to Vincennes, Ind. $50,000.

†Illinois and **Missouri**—SUBSTATION—U. S. Eng., 816 U. S. Courthouse and Customhouse, St. Louis, Mo., bids soon electric substation, theatre, chapels, incinerator, etc., Scott Field, Ill., and Jefferson Barracks, Mo.

Ill., Glenwood — SWIMMING POOL — Glenwood Manual Training School, plans by Olsen & Urbain, 8 E. Huron St., Chicago, swimming pool and 82x100 ft. gymnasium. About $75,000.

★**†Mass., Chicopee Falls**—AIRPORT—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., runways, grading, drainage, airport exten., Westover Field. $600,000.

N. J., Camden—PARK IMPROVEMENT—Camden Co. Park Comm., Court House, imprv. parks, paths, fences, grading, landscaping, etc. $55,500. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

N. J., Marlboro—GROUND IMPROVEMENTS—State Dpt. Institutes and Agencies, State House, Trenton, imprv. grounds, excavating, grading, landscaping, paths, Marlboro State Hospital. $81,191. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

New York—RURAL ELECTRIC LIGHT LINES, etc.—Electric Co-operative to be formed, c/o G. Talbott, Fillmore, rural electric light and power lines, Allegany Co. areas. Over $125,000. Seeking REA funds soon.

★**N. Y., North Beach** — HANGAR — Dpt. Docks, Pier A, North River, New York, plans by Delano & Aldrich, 126 E. 38 St., New York, 3 story, 200x300 ft. hangar, LaGuardia Field, for Pan American Airways $770,000.

N. Y., Whitestone (sta. Flushing)—SHIPYARD—Wheeler Shipyard, Coney Island Creek, Cropsey Ave., Brooklyn, plans by E. W. Kleinert, 8029 Shore Rd., Brooklyn, shipyard. Whitestone Landing, 154 St. and East River. $200,000. CD 4/29—ENR 5/1.

N. C., Charlotte—AIRPORT—Imprv. Douglas municipal airport. $328,508. CD 5/27—ENR 6/5.

N. C., Statesville—AIRPORT—$50,000 bond election July 15. Over $150,000. M. W. Jones, mayor. CD 6/11.

N. D., Grand Forks—AIRPORT—C. J. Evanson, city clk., airport imprvs. $50,000. A. F. Hulteng, city engr.

†Okla., Enid — FLYING SCHOOL — U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., Basic A.C. Flying School, about 3 mi. south of here.

Okla., Miami—AIRPORT—Airport. CAA. $175,000. G. Stein, Miami engr.

★**†Okla., Tulsa**—AIRPORT—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., airport for take off and landing field, Bombing Plant. $1,750,000.

Pennsylvania—OIL DEVELOPMENT—South Penn Oil Co. C. F. Stevenson, vice pres. in charge, Box 176, Bradford, additional extensive

UNCLASSIFIED (Proposed Work, Cont'd.)

expansion facilities, drilling 100 or more wells, purchasing, installing pressure plants, replacing pipe lines, etc. at oil producing properties, various sects. McKean and Warren Counties. $50,000-$100,000.

Pa., Bradford—AIRPORT—Comrs. McKean Co., Smethport, J. Cleveland, comr. in charge, and city of Bradford, M. E. Cornelius, city clk., municipal airport, near here. Over $100,000. J. H. Quirk, city engr.

Pa., Clarendon — OIL DEVELOPMENT — Albert L. Shaner Oil Co., A. L. Shaner, genl. mgr., Bolivar, developing crude oil property, incl. drilling 17 wells, from 1,050 to 1,450 ft. deep, pressure plant for crude recovery from wells, water-flood sys., etc. near here. $45,000-$50,000.

Pa., Corry—SWIMMING POOL, etc.—G. B. Porter, city clk., concrete swimming pool, pavilion and bathhouse, Mead Park. $30,000. D. Williams, city engr.

Pa., Grand Valley—CRUDE OIL DEVELOPMENT—G. Hunter, Tionesta, and R. Hunter, Grand Valley, extensive development 140 acre crude oil property, near Grand Valley, incl. drilling 4 or more 600 ft. wells, pumping jacks, sucker rods, tubing, pressure plant to force recovery of crude from wells, etc. $40,000.

†Pa., Indiantown Gap—SPORTS CENTER—Con. Q.M., sports center. $84,000.

Pa., Johnsonburg — LAGOON — Castanea Paper Co., Johnsonburg, 50 million gal. lagoon on 20 acre site, 10,000 ft. south of paper and pulp mill. Over $25,000.

Pa., McConnellsville — AIRPORT — U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., imprv. airport, 120x200 ft. hangar, night lighting sys., 50,000 gal. gasoline and oil dispensing sys. $250,000.

Pa., New Cumberland—LANDSCAPING—Con. Q.M., landscaping, general imprvs. at reception center.

Pa., Phila.—TRACK LINE—Philadelphia Transportation Co., 2251 N. 9 St., Phila., single track line Margaret-Lefevre St. between Milnor and Thompson Sts. $43,047.

Pa., Pittsburgh — SUBMARINE CABLE CROSSING—Duquesne Light Co., Duquesne, and 435 6th Ave., Pittsburgh, submarine cable crossing in back channel Ohio River, between Brunot Island and W. Carson St., incl. 54 in. steel pipe conduit, with 10 ducts encased in concrete and concrete sill, Carson St. term nus. Over $25,000.

Pa., Reading—GRADING—Reading Housing Auth., grading, landscaping, walks, roadways, etc., Glenside Housing. Over $25,000.

Pa., Wilkes-Barre—TROLLEY TRACK REMOVAL—C. Loveland, mayor, removing trolley car tracks various streets, bituminous repaving afterwards. Over $50,000. G. B. Walker, city engr.

South Dakota—TRANSMISSION LINES—Sioux Valley Empire Electric Assn., Colman, additional rural transmission lines, $100,000.

Tex., Bonham—AIRPORT—B. F. Graham, Waggoner Bldg., Fort Worth, airport and field development for training fledgling pilots, barracks, hangars, etc. $175,000.

Tex., Corpus Christi—RECREATION CENTER—A. C. McCaughan, mayor, recreation center, $120,000.

Tex., Denton—AIRPORT—Airport imprvs. $65,000. Bond election soon.

Tex., Denton—SWIMMING POOL, etc.—Rein.-con. outdoor swimming pool, recreation park imprvs., athletic courts, etc. $50,000. Bond election soon.

★**†Tex., Fort Worth** — AIRPORT — U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., airport. $1,750,000.

Tex., Galveston—BEACH IMPROVEMENT—B. Harris, mayor, beach imprv. boardwalk, playgrounds, grading, drainage, athletic courts, $200,000.

Tex., Houston—AIRPORT—Airport, buildings, etc. Over $200,000.

Tenn., Kingsport — TELEPHONE FACILITIES—Inter-Mountain Telephone Co., Kingsport, imprv. telephone facilities. $65,000.

★**†Tex., Lubbock**—FLYING SCHOOL—U. S. Eng., Citizens Bank Bldg., Denison, complete A.C. Advanced Twin Engine and Bombardier Flying School, 10 mi. west of here. $2,600,000. CD 6/20.

Tex., Mexia—AIRPORT—Airport, ground development, buildings, etc. $100,000.

★**†Tex., Midland**—AIR CORPS TRAINING SCHOOL—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., new A. C. training school. $600,000.

†Tex., Palacios—CYCLONE FENCING—Con. Q.M., Camp Hulen, cyclone fencing. $22,030.

†Tex., San Antonio—AIRPORT—U. S. Eng., 1 and Douglas Sts., N.W., Wash., D. C., Stinson municipal airport for location of 2 observation squadrons of Air Corps.

†Tex., San Antonio—FENCING—Con. Q.M., Camp Stanley, fencing entire camp. $67,882.

†Tex., San Antonio—CYCLONE FENCING—Con. Q.M., Fort Sam Houston, cyclone fencing. $21,735.

†Tex., San Antonio—CYCLONE FENCING—Con. Q.M., Fort Sam Houston, cyclone fencing, Camp Bullis, 18 mi. north of here. $19,480.

★**†Tex., San Antonio**—RUNWAY, PAVING, etc.—U. S. Eng., Federal Bldg., Galveston, grading, drainage, hard paving, 2 runways 150x4,500 ft. $532,600, lighting facilities $56,-965, Kelly Field.

★**Tex., San Antonio**—SWIMMING POOLS—C. K. Quinn, mayor, plans by M. G. Simmons, Aztec Bldg., rehabilitating 5 primary rein.-con. swimming pools and constructing 4 similar pools. $800,000.

Tex., Sherman—AIRPORT—Grayson Co., airport, ground development, buildings. $150,-000. Bonds voted. CD 6/6—ENR 6/12.

Wash., Goldendale—RURAL POWER DISTRIBUTION LINES—Klickitat Co. Pub. Utility Dist., Goldendale, 350 mi. rural power distr. lines. $300,000. Seeking REA allot.

Wash., Pasco—RAILROAD SPUR, etc.—Port of Pasco, railroad spur, pipeline and oil tanks. $35,000.

West Virginia—DISTRIBUTION SYSTEM—Harrison Rural Electrification Assn., Inc. 917½ W. Pike St., Clarksburg, distr. sys., Barbour, Doddridge, Harrison, Tyler Marion and Upshur Counties. Gibbs & Hill, Inc., 600 N. 2 St., Harrisburg, Pa., engrs.

★**Ontario**—GAS WELLS—Dominion Natural Gas Co., 315 Colborne St., Brantford, drilling additional wells in district, Brant Co. $1,000,000.

BIDS ASKED

Bids Asked About July 1

Wisconsin—RURAL LINES—Waushara Co. Electric Co-operative, Wautoma, 295 mi. rural electric transmission lines, $245,000. Wisconsin Development Auth., 602 Tenney Bldg., Madison, engr. CD 3/20—ENR 4/13.

Bids Asked July 2

†N. Y., New York—CLEARING SITE—Pub. Bldgs. Administration, Wash., D. C., clearing site proposed post office, Tompkins Square Station.

Bids Asked July 7

Texas — RURAL LINES—Brazos River Transmission Electric Co-operative, E. D. H. Farrow, pres., Itasca, substations for electric transmission project, Sect. 3, $1,300,000. H. B. Gleb & Co., 1207 Texas Bank Bldg., Dallas, engr.

†Washington—TRANSMISSION SYSTEM—Bonneville Project, P. O. Box 3537, Portland, Ore., furnishing 1,620,000 ft. conductor and accessories for 115 kv. lines of Bonneville transmission sys., Inv. 2015.

Bids Asked About July 15

Iowa—RURAL LINES—Pella Co-operative Electric Assn., Pella, 30 mi. transmission lines, $25,000. K. R. Brown, 802 Van Buren Bldg., Des Moines, engr. CD 6/19.

Bids Asked July 23

Ont., Malton — AERODROME — Secretary Dpt. Munitions & Supplies, Ottawa, 6 additional buildings for Commonwealth Air Training plan, incl. hangar annex etc. Est. about $160,000.

Bids Asked

★**†Ga., Wellston** — HANGARS, etc. — U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., hangars, salvage yards, quarters, flying field auto parks, overhaul shops. $14,000,000.

Tex., Fort Worth—HANGAR—2 story, 23x378 ft. hollow tile, stucco hangar, Meacham Field. $60,000.

Tex., Texarkana—RAIL LINE—War Dpt., 20 St. & Constitution Ave. N.W., Wash., D. C., (approved list contractors) 100 mi. standard gage rail lines, switching sys. layout, etc. $300,000.

LOW BIDDERS

★**Calif., Bakersfield** — LANDING STRIP, etc.—U. S. Eng., 208 Post Office Bldg., Sacramento, June 17, landing strip, runways, taxiways, appurtenant facilities, Flying Field 2, near here, Inv. 1105-41-264, from J. E. Haddock, Ltd., 3578 E. Foothill Blvd., Pasadena, **$531,894.** Est. $490,653. CD 6/10—ENR 6/5.

★**Calif., Fresno**—AIRPORT—U. S. Eng., Sacramento, June 13, landing strip, runways, taxiways, etc. Inv. 1105-41-263, from Warren Southwest, Inc., 2145 E. 25 St., Los Angeles, **$307,243,** est. $256,464, water distr., gas, sewer, storm drain, electric sys., streets, sidewalks, water supply sys., Inv. 1105-41-248, from United Concrete Pipe Co., Box 1, Sta. H, Los Angeles, **$400,000,** est. $310,939, both at Fresno Air base, near here. CD 6/5.

Calif., Los Angeles—HANGAR, etc.—State, A. Boyd, state archt., P. Wks. Bldg., Sacramento, June 17, 1 story, hangar, 2 story, rein.-con. shop unit for California Natl. Guard, from H. F. Hendrickson Co., 301 Glendale Blvd., **$69,750.** CD 6/3—ENR 6/5.

†Calif., Mare Island—DRYDOCK—P. Wks. Officer, Mare Island Navy Yard, June 11, electric services for Drydock 4 and connecting quay walls between Drydocks 3 and 4 and Drydocks 2 and 3, etc., Spec. 10439, from Moore Electric Co., 321 W. Third St., Los Angeles, Item 1, **$163,826;** Abbett Electric Co., 259 Clara St., San Francisco, Item 2, **$146,164.** Est. $150,000. CD 5/27.

†Calif., McClellan Field—AIRPLANE PARKING AREA—U. S. Eng., 208 Postoffice Bldg., Sacramento, June 19, airplane parking area, Inv. 1105-41-271 from McGillivray Constr. Co., P. O. Box 873, Sacramento, **$338,262.** Est. $367,379. CD 6/12.

Calif., Pasadena—RAIL REMOVAL—City, June 16, removal and/or disposal and/or salvage 136,500 lin. ft. 128# grooved girder rail and 47,600 lin. ft. 72# and 75# tee rail, incl. ties, appurtenances from city streets, from L. H. Silberman, 571 17 Ave., San Francisco, **$53,000.** CD 6/11.

★**Calif., Taft**—LANDING STRIP, etc.—U. S. Eng., 208 Post Office Bldg., Sacramento, June 18, landing strip, runways, taxiways, appurtenant facilities, Taft Field, near here, Inv. 1105-41-265, from J. E. Haddock, Ltd., 3578 E. Foothill Blvd., Pasadena, **$526,173.** Est. $595,888. CD 6/10—ENR 6/5.

Del., Wilmington—AIRPORT—U. S. Eng., Phila., Pa., June 16, grading, topsoiling at New Castle County Airport, near here, from Dutcher Constr. Corp., P. O. Box 45, Elkton, Md., **$212,045.** C/D 6/6—ENR 6/12

Me., Greenville—AIRPORT—U. S. Eng., Park Square Bldg., Boston, Mass., June 14, airport, 3,000 ft. runway, from J. R. Cianchette, Pittsfield, **$193,076.** CD 6/5—ENR 3/27.

†Mass., Chicopee Falls—FUELING SYSTEM U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., June 17, A. C. fueling sys., A. from J. G. Roy & Sons Co., 21 Silver St. Springfield, **$58,566** est. $39,970***B and C. from Aqua Systems, Inc., 385 Gerard Ave., New York, N. Y. **$53,695** and **$44,650** respectively, est. $37,970 and $36,100 respectively. CD 6/10—ENR 6/12.

†N. H., Portsmouth—POWER SUBSTATION—P. Wks. Officer, Navy Dpt., Portsmouth, power substation, equip., Spec. 10430, from Westinghouse Electric & Mfg. Co., 10 High St., Boston, Mass., **$142,498.**

†N. J., Morristown—AIRPORT—U. S. Eng., 17 Battery Pl., New York, N. Y., June 20, drainage, paving, lighting, seeding, Morristown airport, from J. P. Burns, Dumont, **$252,977.** CD 6/19.

N. Y., New York—STATION FINISH—Bd. Transportation, 25 Hudson St., June 20, station finish work, part of Rapid Transit R. R., Bway.-East New York station, Route 110, Sects. 6A and 6B, from Atlas Tile & Marble Works, Inc., 238 E. 26 St., **$57,695.** CD 6/10—ENR 6/12.

†N. Y., Tompkinsville—SECTION BASE—P. Wks. Officer, 90 Church St., New York, June 17, section base, from Hillers Thompson Co., 121 W. 49 St., New York. **$29,600.** CD 6/4—ENR 6/12.

†Tex., Wichita Falls — HANGARS — U. S. Eng., Citizens Bank Bldg., Denison, structural steel and steel roof deck for 10 A.C. hangars, Sheppard Field, from Mosher Steel Co., 5101 Maple St., Dallas, **$257,262;** 20 door assemblies for above hangars, from Truscon Steel Co., Constr. Bldg., Dallas, **$91,775.**

★**†Washington** — TRANSMISSION LINE — Bonneville Project, P. O. Box 3537, Portland, Ore., June 20, Covington-Coulee transmission line, from Fritz Ziebarth, Vancouver, **$879,822.** CD 6/16.

†Wash., Fort Lewis—GASOLINE STORAGE and DISTRIBUTION SYSTEM — Con. Q.M., June 12, gasoline storage and distr. sys., 41st Div. National Guard, from Lord & Loryea, 4507 S.E. Milwaukee St., Portland, Ore. **$148,943.** CD 6/4.

Wash., Seattle — COOLING TOWER — City Light Dpt., City Light Bldg., June 12, cooling tower, exten. at south substation, two 92x280 ft. tunnels, from Henrik Valle Co., 407 Third Ave. W. **$58,472.** E. R. Hoffman, city light supt.

CONTRACTS AWARDED

★**†Ala., Mobile** — RUNWAYS — U. S. Eng., Mobile, additional runways, imprv. landing field, Brookley Field, to J. F. Bloomer & J. D. Bonness, Inc., 1409 N. 27 St., Milwaukee, Wis., **$1,856,637.** Bids 5/28. CD 5/27—ENR 6/5.

Calif., Los Angeles—TANK—Southern Calif. Gas Co., 810 S. Flower St., 38 x 273 ft., rein.-con. tank mostly below ground, to Ford J. Twaits Co., 816 W. 5th St. approx. **$200,000;** steel to be built on top of tank, to Bartlett Hayward Co., 200 Scott St., Baltimore, Md., approx. **$500,000.**

Calif., Oakland—SHIPYARD ADDITIONS—Moore Dry Dock Co., foot of Adeline St., shipyard addns., incl. generator building, pipe shop building, paint shop, concrete pits, shop and office building, to D. W. Nicholson, 357-12 St., **$43,200.**

Calif., San Diego—PIER—Fishing and pleasure pier, Ocean Beach, exten. 2,300 ft. in open ocean. **WPA. $163,587.** J. Brennen, Harbor Office, foot of Bway., engr.

†Calif., San Diego—PIER—Yards & Docks, Navy Dpt., Wash., D. C., pier and transit shed, Contr. NOY 4507, to Mojave Corp., 1074, West Los Nietos Rd., Los Nietos, and Person & Hollingsworth, 2801 W. Mission Rd., Alhambra, **$140,000,** cost-plus-fixed-fee-basis.

†Calif., San Diego—TRACK FACILITIES—Yards & Docks, Navy Dpt., Wash., D. C., imprv. railroad track facilities, Naval Operating Base (Supply Depot), to T. A. Kvale, 6216 Madden Ave., Los Angeles, **$34,490.**

†Conn., Windsor Locks—AIRFIELD—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., pipe drains, culverts, Windsor Locks Airfield, to I. Capaldi & Sons, Inc., 296 Silver Spring St., Providence, R. I. **$257,202.**

UNCLASSIFIED (Contracts Awarded, Cont'd.)

Iowa—LAYING RAILS—Chicago, Burlington & Quincy R. R. F. T. Darrow, ch. engr., 547 W. Jackson Blvd., Chicago, Ill., replacing 10 mi. 90 lb rails between Albia and Hamilton, own forces. Over **$25,000.**

Ia., Sioux City—ATHLETIC FIELD—Independent School Dist., Sioux City, athletic field imprvs., grandstands. **WPA. $93,555.**

★**†La., Burrwood**—NAVAL BASE—Yards & Docks, Navy Dpt., Wash., D. C., Naval Base, entrance to Mississippi River from Gulf, incl. building, etc., to W. Horace Williams Co., 221 N. Line St., New Orleans, **$650,000.** Awarded 6/19. CD 3/27—ENR 4/3.

La., Gueydan — NATURAL GAS SYSTEM — Mayor and Bd. Aldermen, complete natural gas transmission and distr. sys., to Betpouey & Rittiner, Canal Bank Bldg., New Orleans, **$50,-890.** Bids 6/17. CD. 6/3—ENR 6/5.

Minn., Eveleth—AIRPORT—Airport. **WPA. $445,393.** CD 10/9—ENR 10/24.

★**†Minn., Minneapolis**—HANGAR—Yards & Docks, Navy Dpt., Wash., D. C., hangar, service buildings, Wold Chamberlain Naval Air Base, to Standard Constr. Co., 604 National Bldg., **$776,643.** CD 6/10—ENR 6/12.

★**†Miss., Biloxi**—AIR SCHOOL—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., Technical Air School, to Newton & Glenn, J. A. Jones Constr. Co., and Knost Constr. Co., Hattiesburg and Pass Christian. **$10,000,000** to **$12,000,000,** cost-plus-basis. Awarded 6/7. G. R. Price, New Orleans, La., archt. CD 4/28—ENR 5/1.

Miss., Hattiesburg—AIRPORT—G. Calhoun, mayor, imprv. airport. **WPA. $164,993.** CD 1/7—ENR 1/9.

★**Miss., Jackson**—AIRPORT—Hinds Co. Bd. Supervs., airport half-way between Clinton and Raymond. **WPA. $500,000.** CD 2/13—ENR 2/20.

★**Miss., Lockart** — AIRPORT — Bd. Supervs., Lauderdale Co., H. Cameron, clk., Meridian, airport, **WPA. $500,000.** L. Brandon, Meridian, ce. engr.

Mo., Cape Girardeau—AIRPORT—H. Statler, mayor, airport, **WPA. $194,370.** CD 4/30—ENR 5/8.

★**†N. J., Lakehurst**—AIR STATION—Navy Dpt., 18 St. and Constitution Ave., N.W., Wash., D.C., two 150x400 ft. steel hangars, 120 ft. high, school building addns., Naval Air Station to Karno-Smith Co. and Duffy Constr. Co., Broad St. Bank Bldg., Trenton, **$2,000,000.** CD 4/4—ENR 4/10.

N. C., Rocky Mount — AIRPORT — L. B. Aycock, city mgr., new airport. **WPA. $268,-566.**

N. Y., Endicott—AIRPORT—U. S. Eng., Security Mutual Bldg., Binghamton, drainage, paving Tri-Cities airport, to Binghamton Constr. Co. Inc., 307 Marine Midland Bank Bldg., Binghamton, **$182,429.** Bids 5/6. (**Correction**—contractor.) CD 6/17—ENR 6/19 under CA.

N. Y., Syracuse—FOUNTAINS, etc.—State, Dpt. Agriculture and Markets, State Bldg., Albany, fountains and lagoons at State Fairgrounds, **WPA. $137,000.**

†Okla., Oklahoma City — GASOLINE FUELING SYSTEM—U. S. Eng., 1 and Douglas Sts. N. W., Wash., D. C., A. C. gasoline fueling sys., to Flotation System, Inc., 4031 Goodwin Ave., Los Angeles, Calif. **$101,780.**

†Pa., Middletown — AIRPLANE REPAIR DOCK—U. S. Eng., 332 Post Office Bldg., Baltimore Md., 200x260 ft. airplane repair dock, to Sordoni Constr. Co., Forty Fort, **$372,300.** Bids 5/31. CD 6/10—ENR 6/12.

Tenn., Memphis — AIRPORT — U. S. Eng., P. O. Box 97, Memphis, lengthening, strengthening runways, municipal airport, to Lehman-Roberts Co., 575 N. Front St., **$138,749.** Bids 6/3. CD 5/22—ENR 5/29.

Tex., Beaumont—STEEL PIPE MAIN—Magnolia Petroleum Co., Beaumont, laying 94 mi. 14 in. welded joint steel pipe main and 30 mi. 16 in. pipe between production fields Jackson Co. and refinery plant, here, to O. C. Whitaker, D. Waggoner Bldg., Fort Worth, about **$240,000.**

Tex., Bonham—AIRPORT IMPROVEMENTS —1 story administration building, field development, municipal airport. NYA labor. **$60,000.**

Tex., Fort Worth—AIRPORT—S. H. Bothwell, city mgr., clearing, grubbing, removal existing fences, **WPA. $77,565.** W. O. Jones, Fort Worth, engr.

Tex., Fort Worth — RUNWAYS — New runways, widening, lengthening existing runways, taxiways, field drainage, exten. field lighting, **WPA. $438,000.**

Tex., Sweetwater—RUNWAY—U. S. Eng., Federal Bldg., Galveston, paving 150x4,500 ft. runway, to Bell & Braden, Amarillo. **$66,370.**

★**†Wash., Port Angeles**—SECTION BASE—Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., section base, facilities, imprvs. for normal and emergency communications, Bainbridge Island Radio Station, NOY 4210, Ch. R., to Austin Co., 16112 Euclid Ave., Cleveland, O. **$870,000.**

†Wash., Port Townsend—SECTION BASE—Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., section base, to Austin Co., 16112 Euclid Ave., Cleveland, O., **$51,500.**

†Wash., Seattle—AIR STATION—Navy Dpt., 18 St and Constitution Ave. N.W., Wash., D. C., buildings, accessories at Sand Point Naval Air Station, NOY 4210, ch. S, to Austin Co., 16112 Euclid St., Cleveland, O., **$192,290.** CD 4/4—ENR 4/10.

Wyo., Rock Springs — AIRPORT — Civil Aeronautics Auth., Commerce Bldg., Wash., D. C., airport, for City, to C. C. Warrington, 515 E 25 St., Cheyenne, **$268,652.** Bids 6/5. CD 5/20—ENR 5/22.

Alta., Innisfail—AERODROME—Secretary Dpt. Transport, Ottawa, Ont., aerodrome, clearing, stumping, grubbing, hard-surfaced runways, to Crown Paving Contg. Co. Ltd., Edmonton. About **$180,000.** CD 2/19.

Alta., Kinsella—GAS WELLS—North Western Utilities, Ltd., Edmonton, drilling 5 natural gas wells, average depth 2,150 ft., to Drilling Contractors, Ltd., Edmonton. **$75,000.**

Alta., Suffield—EXPERIMENTAL STATION BUILDINGS — Dpt. National Defense for Air, Ottawa, Ont., various wood buildings, Field Experimental Station, to Bennett & White Constr. Co. Ltd., Examiner Bldg., Calgary. **$240,000.**

Man., La Prairie—HANGAR—Dpt. Transport, Ottawa, Ont., landplane hangar, to Claydon Co. Ltd., 253 St. Annes Rd., Winnipeg, **$80,000.**

N. B., Saint John — WHARF — Dominion Coal Co., Ltd., St. John, wharf, to F. Roberts, 36 Cedar St. **$25,000.** CD 6/16.

Ont., Dunnville — RUNWAYS, etc. — Dpt. National Defense for Air, Ottawa, runways, taxi strips, etc., Service Flying Training School 7, to Dufferin Paving & Crushed Stone Ltd., Fleet St. W., Toronto, about **$150,000.**

Ont., Yarmouth Centre — RUNWAYS, etc. — Dpt. National Defense for Air, Ottawa, 2 in. asphalt surfacing airport runways, to Sterling Constr. Co. Ltd., 2492 Sandwich St., E. Windsor, **$75,000.**

★**Que., Dorval** — HANGARS, etc. — Dpt. Transport, Ottawa, Ont., exten. hangars, boiler room, apron, at Dorval Airport, to Leclair-Dupuis, Ltd., 620 Cathcart St., Montreal. About **$650,000.**

LATIN AMERICA

Mexico—Ministry of Communications, Jose Medina, in charge, Mexico City plans new railroad from Barron de Escandon, Tlaxacala, on Mexican Ry. and Vera Cruz, with branches to Acapulco and Las Sedas on Mexican Southern Ry.

Mexico—Owner, c/o S. C. Lee, archt., 1648 Wilshire Blvd., Los Angeles, Calif., plans 4 theatres. **$1,000,000.**

PUBLIC BUILDINGS

PROPOSED WORK

†Ala., Anniston—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, $54,250, field house about $70,000. Fort McClellan.

Ala., Auburn—Alabama Polytechnic Institute, 2 new dormitories, women and men. $200,000.

†Ala., Huntsville—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., 500 bed recreation camp.

†Ala., Montgomery—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., temporary construction Maxwell Field. $224,317.

★**†Ala., Sylacauga**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., plant for manufacture TNT, DNT and tetryl. $24,675,000.

Ariz., Casa Grande—Casa Grande Housing Auth., 35 buildings for slum clearance. $150,-000.

†Ariz., Fort Huachuca—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., ice plant, $80,000.

★**†Ark., Jacksonville**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., fuse and detonator plant, $33,500,000. Ford, Bacon & Davis, 39 Bway., New York, N. Y., archts. CD 6/13—ENR 6/19.

†Ark., Little Rock—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp J. T. Robinson. $67,850.

†Ark., Little Rock—Con. Q.M., Camp Joseph T. Robinson, Base Hospital addn. $63,750.

†Ark., Little Rock—Con. Q.M., Camp Joseph T. Robinson, athletic field house, $77,000.

Ark., Little Rock—Pulaski Co. Housing Auth., low cost houses.

†Ark., Little Rock—Con. Q.M., Camp Joseph T. Robinson, 5 mess halls, 5 recreation buildings, 200 tents, 10 warehouse tents. $132,240.

★**†Ark., Marche**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., picric acid plant, known as Mournelle Ordnance Works, west of here and about 15 mi. northwest of Little Rock. $8,000,000.

Calif., Bakersfield—Lakeside Union Elementary School Dist., voted $150,000 bonds school. CD 5/14—ENR 5/22.

†Calif., Camp Callan—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed, Camp Callan. $ 500.

†Calif., Fort Ord—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed. $115,500.

Calif., Los Angeles—University of California, 405 Hilgard Ave., W. Los Angeles, 3 story student health service building, $150,-000. Allison & Allison, 420 Edison Bldg., archts.

†Calif., McClellan Field—U. S. Eng., 208 Postoffice Bldg., Sacramento, completing plans temporary buildings, utilities.

★**Calif., Napa**—Napa Union High School Dist., voted $650,000 bonds, new high school-junior college, and high school-junior high school addns. CD 5/26—ENR 5/29.

Calif., North Sacramento (br. Sacramento)—North Sacramento School Dist. voted $250,000 bonds elementary schools addns., new school. CD 5/20—ENR 5/22.

†Calif., Riverside—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp Haan. $82,600.

★**Calif., San Francisco**—Housing Auth. of City and San Francisco Co., 525 Market St., plans completed by D. D. Stone, 381 Bush St., and C. E. J. Rogers, Phelan Bldg., De Haro Plaza Low-Rent Housing. Cal. 1-9, incl. sixteen 2½ story buildings, one 2 story building, and one 2½ story administration building. $600,000.

†Calif., San Luis Obispo—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D.C., post exchange facilities, vehicle housing shed, $62,300; field house about $70,000.

Calif., San Mateo—San Mateo High School Dist. voted $380,000 bonds, incl. $200,000 high school at San Bruno, music building and classroom addns. to other schools. CD 3/12—ENR 3/20.

†Calif., San Miguel—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, camp Roberts. $44,400.

†Calif., Vallejo—Farm Security Administration, 30 Van Ness Ave., San Francisco, completing specifications 200 portable dwelling units, Mare Island Navy Yard.

Colo., Denver—Colorado State Home for Dependent Children, 2305 S. Wash St., heating plant building, equip. $60,000. Prouty Bros. Eng. Co., Exchange Bldg., engrs.

†Colo., Denver—Con. Q.M., Lowry Field, mess hall, Lowry Field, $17,940.

†Conn., Bantam—Federal Works Agency, Wash., D. C., 40 units defense housing. $120,000. CD 6/3—ENR 6/12.

Conn., Middletown—Supt. School, Court St., preliminary surveys, brick, steel trade school. $150,000. Architect not appointed.

★**†Conn., New Britain**—Federal Works Agency, Wash., D. C., plans by H. F. Ludorf, 410 Asylum St., Hartford, 200 dwelling units, Ellis St. and Rocky Hill Ave. Southeastern Sect. $700,000.

†Conn., Windsor Locks—Federal Works Agency, Wash., D. C., sketches, 85 units defense housing, $300,000. H. Stubbins, Jr., 46 Cornhill, Boston, Mass., archt. CD 6/6—ENR 6/12.

Del., Dover—Hy. Dpt., plans by G. E. Pope & A. Kruse, Equitable Bldg., Wilmington, administration building. $155,000.

★**†Fla., Key West**—Navy Dpt., 18 St. & Constitution Ave. N.W., Wash., D. C., preliminary plans Naval Hospital. $1,000,000.

Fla., Miami—Bd. Comrs. Dade Co., hospital at State Insane Asylum. $250,000.

†Fla., Panama City—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., expansion hospital facilities, $129,560.

†Fla., Starke—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, $94,600; field house about $70,000, Camp Blanding.

†Fla., Tampa—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., additional facilities McDill Field, 810th Engineers Batallion, barracks, supply rooms, day rooms, mess halls, etc. $141,744.

†Fla., Valparaiso—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., hospital facilities expansion, Eglin Field, $188,260.

†Ga., Albany — Albany Housing Auth., 100 housing units, School for Advanced Flyers, for USHA. CD 6/3—ENR 6/12.

Ga., Augusta—Augusta Housing Auth., 100 dwellings, low cost housing, GA 1-1A, USHA allotted $304,200. CD 2/7—ENR 2/13

†Ga., Camp Stewart—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $71,700; field house about $70,000.

†Ga., Columbus—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., vehicle housing shed, $229,100; ice plant $39,800; field house about $70,000, Fort Benning.

†Ga., Fort Oglethorpe—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed, $6,500.

†Ga., Macon—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post

PUBLIC BLDGS. (Proposed Work, Cont'd.)

exchange facilities, vehicle housing shed, Camp Wheeler, $39,600.

†**Idaho, Boise**—U. S. Eng., 628 Pittock Blk., Portland, Ore., bids soon, 12 magazine storage buildings, plans bombsight repair shop, headquarters structure, hangar maintenance and machine shop, rope and paint shop, airbase.

†**Ill., Chanute Field (Belleville)**—War Dpt., 20 St. and Constitution Ave. N.M., Wash., D. C., field house. About $70,000.

†**Ia., Des Moines**—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., purchasing land, equipping, constructing ammunition plant.

†**Kan., Fort Riley**—Con. Q.M., repair shops for motor equip. $89,000.

†**Kan., Fort Riley**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed. $45,200.

★**Kan., Shawnee**—Bd. Educ., Johnson Co. Olathe, $500,000 bond election July 12, rural high school addn. Hardy & Schumacher, Scarritt Bldg., Kansas City, Mo., archts.

†**Ky., Fort Knox**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed $100,300, ice plant $66,200, field house about $70,000.

★†**Kan., Wichita**—Boeing Airplane Co., 200 W. Michigan Ave., Seattle, Wash., expansion bomber assembly plant facilities, incl. $12,231,272 for land, buildings, and $5,368,728 for machinery, equipment, tools. Defense Plant Corp., Wash., D. C., will finance.

†**La., Alexandria**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., 2 shops, 1 grease and inspection rack oil house wash rack, Camp Claiborne, $159,000.

†**La., Alexandria**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., 3 shops, 1 grease and inspection rack, 1 oil house, wash rack, $288,800; 2 shops, 1 grease and inspection rack, 1 oil house, $155,200, all at Camp Livingston.

†**La., Alexandria**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., field houses, Camps Livingston and Claiborne about $140,000, post exchange facilities, vehicle housing shed, Camp Claiborne $91,900, at Camp Livingston $72,500.

La., Lake Charles—Lake Charles Housing Auth., Lake Charles, rejected bids May 19, 40 duplex houses in 80 units. $340,000. Will readvertise. Dunn & Quinn, 327 Hodges St., archts. (**Correction**—status) CD 6/11—ENR 6/19, under CA.

†**La., Leesville**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., ice plant $39,800, vehicle housing shed $376,100, Camp Polk.

★†**La., Monroe**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., anhydrous ammonia plant. $16,750,000.

†**Md., Aberdeen**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed, Aberdeen Proving Ground. $70,450.

†**Md., Aberdeen**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., railroad repair shop, carpenter shop, warehouse. $215,000.

†**Md., Annapolis**—Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., bids in July, 2 and 3 story, brick, steel hospital addn., Naval Academy. $475,000.

†**Md., Fort George G. Meade**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., motor repair shop. $205,000.

†**Md., Fort George G. Meade**—Con. Q.M., rejected bids June 3, theatre. Will readvertise. CD 5/22—ENR 5/29.

†**Md., Fort George G. Meade**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed. $107,400.

Md., Loch Raven—State, Baltimore, plans by H. P. Hopkins, 10 E. Mulberry St., 2 story, concrete, brick administration building, Maryland State Training School for Boys; also sewerage sys.

†**Mass., Ayer**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing sheds, Fort Devens. $70,200.

Mass., Boston—Institution Dpt., City Hall Annex, plans nearing completion by H. F. Kellogg, 32 Commercial Ave., 1 story, 49x124 ft. brick, steel laundry, concrete fdn., Long Island Hospital. $45,000.

Mass., Chicopee—Bd. Educ., bids in July, 1 and 2 story, bsmnt., 62x186 ft., brick, steel trade school, 1 story, 80x200 ft. and 1 story, 50x150 ft. ells, Quarry Ave. and Front St. $180,000. H. J. Tessier, 220 Dwight St., Springfield, acht. CD 4/30—ENR 5/8.

★**Mass., Everett**—City Hall, Bway. and Church Sts. $500,000. Sketches by J. H. Ritchie & Assoc., 20 Newbury St., Boston. CD 1/13—ENR 1/23.

†**Mass., Falmouth**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing sheds, $122,200, field house about $70,000, Camp Edwards.

†**Mich., Battle Creek**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed $64,800, field house about $70,000, Fort Custer.

Mich., Detroit—Bd. Educ., 1354 Bway., plans by N. Chester Sorensen Co., 2200 Industrial Bank Bldg., 2 story, bsmnt., brick, steel, rein.-con. Redford High School, plain fdn. $160,000.

Mich., Detroit—Bd. Educ., 1354 Bway Ave., plans by Shreve, Anderson & Walker, 914 Marquette Bldg., Detroit, stone 2 story, bsmnt., brick, steel school. $153,000.

†**Mich., Detroit**—Detroit Housing Auth., 500 units housing for industrial workers for USHA. CD 6/3—ENR 6/12.

†**Mich., Detroit** — Federal Works Agency, Wash., D. C., 500 units housing for industrial workers. CD 6/3—ENR 6/12.

†**Miss., Hattiesburg**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $96,800, ice plant $82,800, field house about $70,000, Camp Shelby.

Mo., Jefferson City—Corporation, c/o R. R. Nacy, pres., Chamber of Commerce, Central Missouri Trust Bldg.; plans by G. E. McIntyre, 1905 W. Main St., 2 story, bsmnt., 100x198 ft., brick, stone, rein.-con. office, E. Capitol St., for Missouri Unemployment Compensation Comn. $160,000-$200,000. CD 6/21/40—ENR 6/20/40, under Sedalia.

★†**Mo., Louisiana**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., anhydrous ammonia plant. $16,750,000.

†**Mo., Poplar Bluff**—National Youth Administration, Jefferson City, machine shop, 3 barracks.

†**Mo., Rolla**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., ice plant $46,400, field house about $70,000, vehicle housing shed $110,000, Fort Leonard Wood.

†**Mont., Glacier Park**—Pub. Bldgs. Administration, Wash., D. C., withdrew bids to have been opened June 6, garage, Border Station. CD 5/15—ENR 5/22.

★†**Nev., Hawthorne**—Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., expansion Hawthorne ammunition plant. $1,995,000.

†**N. J., Fort Dix**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing sheds, $48,300; field house, about $70,000

†**N. J., Fort Monmouth**—War Dpt., 20 St, and Constitution Ave. N.W., Wash., D. C., post exchange facilities, $30,000

N. J., Newark—Bd. Educ., Education Bldg., Green St. imprv. altering high school buildings. $308,111. WPA. C. Malstrom, Orange and N. 6 Sts., Newark. WPA and owner's engr.

N. J., Long Branch—Long Branch Housing Auth., 88 dwellings, low cost housing, NJ 8-2. USHA allotted $414,000.

N. J., Perth Amboy—Perth Amboy Housing Auth., City Hall, plans by M. Leibowitz, 313 State St., Perth Amboy, low cost housing, five 2 story, bsmnt., brick apartments. $200,000. USHA.

†**N. Y., Great Bend**—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., post exchange facilities vehicle housing sheds, field house, about $10,000, Pine Camp, $229,850.

N. Y., Mamaroneck—Plans by A. H. Knappe & Assoc., 192 Lexington Ave., New York, Central School addn. $150,000. Town will vote June 28 on project.

†**N. Y., Schenectady**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., depot addn. $350,000.

†**N. Y., West Point**—Con. Q.M., U. S. Military Academy, laundry. $299,000.

N. C., Asheville—Bd. Educ., high school. $200,000. T. C. Roberson, supt.

N. C., Fayetteville—Fayetteville Housing Auth., 56 dwellings, low cost housing, NC 9-1 and 34 dwellings Ind. 3-3. USHA allotted $360,000. CD 2/7—ENR 2/13.

†**N. C., Fort Bragg**—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $46,500, field house about $70,000.

N. C., Raleigh—University of North Carolina, Chapel Hill, 209x346 ft. armory-coliseum, on campus, $300,000.

†**N. C., Wilmington**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $71,550; field house about $70,000; ice plant $39,800, Camp Davis.

N. D., Grand Forks—C. J. Evanson, city aud., approved $175,000 bonds, armory auditorium. $175,000.

O., Bellefontaine—Imprv. municipal waterlight plant, installing 6,000 KWH turbine generator. $180,000. F. M. Baxley, chf. Utilities engr.

O., Berea—Installing 2,000 kw. turbo-generator and auxiliary equip. $219,000.

O., Columbus—3 story administration building, traffic tower, Port Columbus Municipal Airport. $215,000. F. W. Maetzel, City engr.

O., Dover—Light plant imprvs., installing high pressure boiler unit, $170,000.

O., Tipp City—Imprv. power plant, installing 1,250 kw. turbine. $80,000. W. Barrows, Reibold Bldg., Dayton, engr.

†**Okla., Fort Sill**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, $29,800.

Okla., Norman—Bd. Affairs Oklahoma City, industrial research laboratory at University of Oklahoma. $407,500. J. Smay, Norman, engr.

Okla., Oklahoma City—Bd. Affairs, 5 story nurses home, University Hospital. $335,000. J. Smay, Norman, engr.

Okla., Stillwater—Bd. Affairs, Oklahoma City, new library for A&M College. $282,500. P. Wilbur, Stillwater, engr.

★**Pa., Bethlehem** — Bethlehem Housing Auth., R. Pfeifle, chn., R. Neymoyer, secy.-treas., plans by Lovelace & Spillman, 103 W. Broad St., 230 low cost dwellings Over $1,000,000. USHA.

★**Pa., Canonsburg**—Washington Co. Housing Auth., Courthouse, defense housing development. $2,500,000. Applied for USHA funds. C. C. & E. E. Compton, 4 Ave. and Thompson St., Donora, and N. B. Kuhns, 5 St., McDonald, archts.

Pa., Harrisburg—General State Auth., 2 and Locust Sts., executive mansion for Governor of Pennsylvania.

†**Pa., Indiantown Gap**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed $33,300, field house about $70,000.

Pa., Johnstown—Johnstown Housing Auth., J. Siciliano, plans by H. A. Bailey, 105-6 Medea Bldg., housing development. $1,000,000. CD 2/4—ENR 2/6.

★†**Pa., Phila.** — Federal Works Agency, Wash., D. C., 1,000 defense housing units, Old Oxford Rd. $3,500,000.

†**Pa., Phila.** — Philadelphia Housing Auth., 21 St. and Parkway, 470 units housing for Navy Yard workers, for USHA. CD 6/3—ENR 6/12.

Pa., Pittsburgh—Bd. Educ., West Deer Twp., D. W. Grill, pres., Russelton, plans by J. H. Phillips, 715 Wabash Bldg., 2 story, bsmnt., brick high school. $300,000.

S. C., Columbia—Richland Co. Library Bd., Sumter and Washington Sts., W. C. Thomas, secy. Bd., new library 3 story at center with two 2 story wings, brick, granite. $250,000. Lafaye, Lafaye & Fair, 1226 Sumter St., archts.

†**S. C., Columbia**—War Dpt., 20 St. and Constitution Ave N.W., Wash., D. C., post exchange facilities, vehicle housing shed $70,900, field house, about $70,000. Fort Jackson.

†**S. C., Spartanburg**—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp Croft. $41,400.

†**S. D., Fort Meade**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., vehicle housing shed, $36,000.

★**Tenn., Chattanooga**—Chattanooga Housing Auth., additional housing. $1,000,000. R. H. Hunt & Co., Chattanooga Bank Bldg., archt. CD 4/16—ENR 4/24.

†**Tenn., Tullahoma**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $74,020, field house about $70,000, ice plant $52,500, Camp Forrest.

†**Tex., Abilene**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed $60,250, field house about $70,000, Camp Barkeley.

†**Tex., Abilene**—Con. Q.M., Camp Barkeley, A.C. shops, dispensary, operations and administration buildings, etc. $189,152.

†**Tex., Brownwood**—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., field house, Camp Bowie. About $70,000.

†**Tex., Camp Bowie**—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, $155,300.

Tex., Corpus Christi—Bd. Educ., W. B. Ray, pres., plans by Brock, Roberts & Anderson, Jones Bldg., school. $150,000.

Tex., Crowley—Bd. Educ., c/o W. D. White, plans by C. O. Chromaster, 401 Century Bldg., Fort Worth, 1 story, brick, concrete, stone school. $150,000.

Tex., Eagle Pass — Eagle Pass Housing Auth., 52 dwellings, low cost housing, TEX. 19-1. USHA allotted $180,000. CD 2/4—ENR 2/6.

†**Tex., Fort Bliss**—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, $81,650.

†**Tex., Galveston**—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., vehicle housing shed, Fort Crockett. $9,800.

Tex., Grand Prairie—G. H. Turner, mayor, hospital. $150,000.

†**Tex., Hitchcock**—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp Wallace, $46,690.

★†**Tex., Houston**—Hughes Tool Co., 300 Hughes St., constructing, equipping plant for manufacture aircraft parts, $851,575 for land and building, $2,873,426, machinery and equip. Total cost $3,725,001. Defense Plant Corp. will finance. CD 2/13—ENR 2/20.

PUBLIC BLDGS. (Proposed Work, Cont'd.)

Tex., LaMarque—Bd. Educ., plans by L. A. Cato, 500 Stuart Ave., Houston, brick, stone, steel school. $300,000.

Tex., Lubbock—Lubbock Housing Auth., 130 dwellings, low cost housing, TEX. 18-1. USHA allotted $463,500. CD 2/7—ENR 2/13.

Tex., Lufkin—Angelena Co., 2 to 3 story, part bsmnt., brick, rein.-con. hospital plant. $210,000. WPA.

†Tex., Mineral Wells — Con. Q.M., Camp Wolters, hospital facilities bldgs. $317,073.

★**†Tex., Mineral Wells** — Federal Works Agency, Wash., D. C., 200 dwellings, ground development, utilities, recreation facilities, administration building. $550,000.

†Tex., Mineral Wells—Federal Works Agency, Wash., D. C., prefabricated demountable houses for families negro soldiers and 85 demountable prefabricated houses for enlisted men and civilians. $250,000.

†Tex., Mineral Wells—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp Wolters, $49,700.

†Tex., Palacios—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, Camp Huben, $98,000.

†Tex., San Antonio—Con. Q. M., Kelly Field, bids soon permanent building to store armament and instruments, Kelly Field. $163,000.

†Tex., San Antonio—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., field house, Fort Sam Houston. About $70,000.

†Tex., San Antonio—U. S. Eng., Federal Bldg., Galveston, bids soon, Cadet Replacement Center, 24 buildings, Kelly Field. $450,000.

†Tex., San Antonio—U. S. Eng., Federal Bldg., Galveston, bids soon, photographic laboratory. $40,000.

†Tex., San Antonio—U. S. Eng., Federal Bldg., Galveston, new hospital unit. $365,408.

†Tex., San Antonio—U. S. Eng., Federal Bldg., Galveston, engine repair shop. $300,000.

★**†Tex., San Antonio**—Con. Q.M., Fort Sam Houston, motor transport school project, Camp Normoyle. $951,000.

★**†Tex., Texarkana**—War Dpt., 20 St and Constitution Ave. N.W., Wash., D. C., plant for ammunition storage, approx. $9,000,000.

†Tex., Victoria—U. S. Eng., 1 and Douglas Sts. N. W., Wash., D. C., 1 story, frame hospital expansion. $160,000.

Tex., Waco—McLennan Co. jail and records building. $350,000.

†Tex., Wichita Falls—U. S. Eng., Cotton Exch. Bldg., Dallas, hospital, etc. $250,000.

★**Tex., Wichita Falls**—Bd. Educ., O. Burden, pres., three 1 story, rein.-con., brick, stone ward school buildings. $600,000.

Tex., Wichita Falls—Bd. Educ., O. Burden, pres., technical high school. $400,000.

Utah, Murray—2,000 kw. diesel generating power plant. $250,000. H. Bletzacker, 4901 S. State St., engr.

†Utah, Ogden—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., 3 additional warehouses.

†Va., Camp Lee—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., vehicle housing shed, post exchange facilities, $46,300.

†Va., Fort Belvoir—War Dpt., 20 St. and Constitution Ave. N. W., Wash., D. C., post exchange facilities, vehicle housing shed, $55,500.

†Va., Fort Eustis—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed. $46,900.

†Washington—Bureau Reclamation, Coulee Dam, 2 power plants to generate about 350,000 hp. in Columbia Basin Dist.

†Wash., Fort Lewis—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., post exchange facilities, vehicle housing shed. $90,000.

†Wyo., Fort Francis E. Warren—Con. Q.M., additional 63 man barracks.

†Alaska, Dutch Harbor—Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., exten. barracks, mess hall, $150,000; exten. seaplane parking area, $200,000, Naval Air Station.

BIDS ASKED

Bids Asked About July 1

Ont., Windsor—Utilities Comn., O. M. Perry, mgr., Canada Bldg., 2 brick, steel, concrete substations, 1 at Wyandotte and Crawford Sts., $141,000, and other at Seminole St. and St. Luke Rd., $63,500. D. J. Cameron, Bartlett Bldg., Archt. CD 5/5—ENR 5/15.

Bids Asked July 2

†Miss., West Point—Farm Security Administration, Little Rock, buildings on farmsteads.

Bids Asked July 3

†Miss., Fulton—Farm Security Administration, Little Rock, dwellings on farmsteads.

†Miss., Gulfport—Farm Security Administration, Little Rock, buildings on farmsteads.

†Miss., Tylertown—Farm Security Administration, Little Rock, Ark., buildings on farmsteads.

★**†Pa., Mifflin Twp.**—Allegheny Co. Housing Auth., 201 County Office Bldg., Pittsburgh, 600 families defense housing for FWA, $1,400,000. R. M. Marlier, 715 Empire Bldg., Pittsburgh, archt. CD 5/9—ENR 5/15.

Pa., Munhall—Allegheny Co. Housing Auth., 201 County Office Bldg., Pittsburgh, defense housing development. Lamont H. Button, Paul MacLean & Lawrence Wolfe, 110 N. Montgomery Ave. N. S., Pittsburgh, archts. CD 5/28—ENR 6/5.

†Wash., Midway—Bonneville Project, P. O. Box 3537, Portland, Ore., operators cottages, dormitory and garages, Inv. 1992.

Bids Asked About July 7

†Md., Aberdeen—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., administration building, barracks, 50x65 ft., Aberdeen Proving Ground. CD 5/15—ENR 5/22.

Bids Asked July 7

N. Y., New York—Dpt. Hospitals, 125 Worth St., renovating and addns. Willard Parker Hospital Isolation Pavilion 3. CD 4/30—ENR 5/8.

Bids Asked July 8

Calif., Los Angeles — Los Angeles Bureau Power & Light, 205 S. Bway., District Headquarters 1, warehouse, buildings, tool house, locker rooms, truck shed, etc. $91,000.

N. Y., Warrensburg — Bd. Educ., Central School Dist. 1, School St., school. Over $150,000. J. R. White, 109 State St., Albany, archt. CD 12/17—ENR 12/19.

Bids Asked July 9

†Ill., Chicago—Pub. Bldgs. Administration, Wash., D. C., remodeling courthouse.

Bids Asked July 11

†Canal Zone — Con. Q.M., Albrook Field, armament and instrument inspection and adjustment at Howard and Albrook Fields; adv. ENR 6/26.

Bids Asked July 14

†California—Bureau Reclamation, Old Post Office Bldg., Sacramento, combination stations, dwellings, section houses, tool houses, woodsheds, Southern Pacific R.R. relocation, Kennett Div. Central Valley Project between Redding and Delta, Spec. 968.

†Calif., Redding—Bureau Reclamation, Old Postoffice Bldg., Sacramento, comb. stations, dwellings, houses, tool houses, woodsheds, for Central Valley Project, Kennett Div., Spec. 968.

Bids Asked July 15

Calif., Berkeley—Regents of University of California, Berkeley, rein.-con. women's dormitory, on campus. Over $150,000. CD 8/28—ENR 9/5.

Bids Asked July 19

Nev., Reno—University of Nevada, 1 story, 170x224 ft. steel, rein.-con. gymnasium, $200,000, DeLongchamps & O'Brien, Gazette Bldg., archts. H. M. Engle, 110 Sutter St., San Francisco, Calif., engr. CD 3/10—ENR 3/13.

Bids Asked July 22

Ia., Mallard—A. H. Stiel, clk., light and power sys., 23x39 ft. power plant, electrical distr. and street lighting sys. $45,000. K. R. Brown, 802 Valley Bank Bldg., Des Moines, engr. CD 2/18—ENR 2/20.

Bids Asked July 25

†Md., Fort George G. Meade—Con. Q.M., 1 story, frame field house, basketball court. $70,000.

Bids Asked About September 15

★**Wis., Superior**—Superior Housing Auth., J. Conroy, exec. dir., 156 family units. $675,000. USHA. R. C. Buck, Inc., 201 Telegram Bldg., Superior, archt.

Bids Asked

★**†Colo., Denver**—U. S. Eng., Lowry Field, barracks, supply rooms, officers' quarters, hospital unit, recreation building, day rooms, mess halls, exchange, 3 warehouses, telephone, telegraph installation, etc. $1,410,905.

†Ill., Rock Island—Con. Q.M., storage building and garage. $200,000.

†Mo., Jefferson Barracks—Con. Q.M., 10,000-man tent camp for use A. C. enlisted personnel. $280,000.

LOW BIDDERS

†Calif., Albany—Div. Purchases, Sales & Traffic, Dpt. Agriculture, Wash., D. C., completing 1, 2 and 3 floors of Frozen Foods Research Laboratory, Western Regional Laboratory, from Moore & Roberts, 693 Mission St., San Francisco. **$126,000.**

†Calif., Fort Ord — Con. Q.M., temporary buildings, 32 barracks, motor repair shop, 2 administration bldgs., etc., from Ford J. Twaits Co., and Morrison Knudsen, 816 W. 5 St., Los Angeles. **$261,590.**

†D. C., Wash.—Pub. Bldgs. Administration, Wash., D. C., June 13, temporary buildings, F, G, and H, from McCloskey & Co., 1618 W. Thompson St., Phila., Pa. **$487,000.**

†Fla., Canal Point—Farm Security Administration, Montgomery, Ala., June 12, 176-family agricultural workers' camp, etc., from W. L. Coston & Sons, Bessemer, Ala. **$332,600.** CD 6/3—ENR 6/5.

†Fla., Homestead—Farm Security Administration, Montgomery, Ala., June 6, migratory labor camp, 197 family units, from [illegible] V. Martin, 2690 S.W. 11 St., Miami. $[illegible]4,634. CD 6/3.

†Ga., Augusta — Con. Q.M., 101 [illegible]etta Bldg., Atlanta, June 16, small arm[illegible] shop building and guardhouse, garage, from [illegible]eatley & Mobley, Augusta. **$298,978.** CD [illegible]2— ENR 6/5.

Kan., Kansas City—City, June 18, st[illegible]ctural steel for exten. power plant and low [illegible]rvice pump. station building, from Kans[illegible] City Structural Steel Co., 21 St. and Metr[illegible]olitan Ave., Kansas City, Kan. **$147,000.** Est $120,000. CD 5/27—ENR 6/5.

†Mass., Ayer—Con. Q.M., Fort [illegible]evens, theater, service club, officers recreation build[illegible]ing, guest house, from John Bowen [illegible] 129 Newbury St., Boston, **$175,956.** CD [illegible]17— ENR 4/24.

Mo., Kansas City—A. C. Everham, [illegible] P. Wks., June 17, altering, constructing [illegible]story, general hospital addn., from Interstate [illegible]onstr. Co., Ridge Bldg. **$214,459.** Est. $450,0[illegible] CD 5/28—ENR 6/5.

†N. J., Fort Dix—Con. Q.M., June [illegible]6, 12 regimental chapels, from O'Driscoll & Grove Inc., 247 Park Ave., New York, N. Y. $262,900. CD 6/10—ENR 6/12.

†Pa., Indiantown Gap—Con. Q.M., June 5, 9 regimental chapels, from Oplinger Constr. Co., Wilkes-Barre. **$161,944.** CD 5/28.

†Pa., Middletown—U. S. Eng., 332 Post Office Bldg., Baltimore, Md., June 18, 250x300 ft. engine repair building, from Gaw Constr. Co., 2402 Market St., Phila. **$445,706.** CD 6/10—ENR 6/12.

★**Pa., Pittsburgh**—Pittsburgh Housing Auth., Dr. B. J. Hovde, in charge, Law & Finance Bldg., grading, drainage, water lines, Arlington Housing 1-4, from R. Meyers, Salem, Ind. **$492,600.** Total est. $4,500,000. Plans in progress for balance of project by A. M. Marsk, W. B. Simboli and R. A. Fisher, 702 Grogan Bldg., archts.

†Tenn., Tullahoma—Con. Q.M., Camp Forrest, 12 chapel buildings, from H. A. Ivey, Decatur. **$192,000.** CD 5/27.

†Tex., Lamesa—Dpt. Agriculture, Farm Security Administration, Fair Park Bldg., Dallas, June 17, farm worker community, gate house, etc. from Walter Nashert Co., 2217 N.W., 25 St., Oklahoma City, Okla., **$199,993.** CD 6/3—ENR 6/5.

†Tex., Mineral Wells—Con. Q.M., Camp Wolters, June 20, 15 buildings in hospital unit, Camp Wolters, from P. O. B. Montgomery, 913 S. Akard St., Dallas, recreation **$37,000**, hospital **$228,000.** CD 6/17—ENR 6/19.

†Tex., San Antonio—Con. Q.M., Fort Sam Houston, June 17, housing, Fort Sam Houston, from W. J. Aldrich, 229 Palm St. **$204,576.** CD 6/10—ENR 6/12.

★**†Utah, Ogden**—Con. Q.M., June 19, three 182x602 ft. warehouses and 7 permanent type sheds, Utah General Depot, from Al Johnson Constr. Co., 608 Foshay Tower, and James Leck Co., 211 S. 11 St., both Minneapolis, Minn., **$737,400** and **$249,300***5** underground magazires, from James I. Barnes Constr. Co., Santa Monica, **$49,900.**

†Wash., Fort Lewis—Con. Q.M., June 17, painting 1,719 buildings, Inv. 6105-41-101, from Bush & Latta, 4366 Finney Ave., St. Louis, Mo. **$246,668.** CD 6/10.

†Wash., Fort Lewis—Con. Q.M., June 18, ordnance shop, boiler house, ordnance warehouses, Inv. 6105-41-109, from Sound Constr. & Eng. Co., Northern Life Tower, Seattle. **$92,552.** CD 6/10.

★**†Alaska**—Civil Aeronautics Auth., Commerce Bldg., Wash., D. C., June 19, 150 prefabricated houses, community houses, central heating plant, Juneau, West Ruby, Nome, Boundary, Big Delta and Cordova, from American Builders, 615 Alaska St., Seattle, Wash. **$630,000.**

†T. H., Fort Shafter—Ninth Zone Con. Q.M., Call Bldg., San Francisco, Calif., June 17, repair and maintenance shop utilities, Hawaiian Ordnance Depot, from R. E. McKee, 4700 San Fernando Rd. W., Los Angeles, Calif., **$300,000.** CD 6/6—ENR 6/12.

CONTRACTS AWARDED

★**†Calif., Campo**—Con. Q.M., Camp Lockett, barracks, theater, stables, etc., to G. A. Fuller & Co., 408 S. Spring St., Los Angeles. **$1,238,815.** Bids 6/5. CD 6/2.

★**D. C., Wash.**—Dist. Comrs., District Bldg., June 10 (1st unit), Central Public Library, between John Marshall Pl. and 6 St. N.W., to Ross Eng. Co., 3308 14 St. N.W. **$894,165.** CD 5/13—ENR 5/15.

★**†Ga., Augusta**—Con. Q.M., 101 Marietta Bldg., Atlanta, warehouse, to A. Farnell Blair, Decatur. **$589,937.**

★**†Ga., Macon**—Macon Housing Auth., defense housing GA 9661, to Beers Constr. Co., 70 Ellis St. N.E., Atlanta **$665,000**, and GA 9063, to R. A. Bowen Constr. Co., Macon **$258,000.** Bids 6/10. CD 6/2—ENR 6/5.

★**Ill., Quincy**—Quincy Housing Administration, 2 slum clearance projects, 200 units and 49 units, to J. I. Barnes Constr. Co., Logansport, Ind. **$764,800.** CD 6/4—ENR 6/12.

★**†Ill., Rock Island**—Con. Q.M., 540 x 1,420 ft. warehouse and drainage facilities, Rock Island Arsenal, to Permanent Constr. Co., 208 S. LaSalle St., Chicago. **$1,657,300.** CD 6/17—ENR 6/19.

PUBLIC BLDGS. (Contracts Awarded, Cont'd.)

†Ill., Savanna—Con. Q.M., Savanna Ordnance Depot, hospital, recreation, commissary, chapel building, to Hagstrom Constr. Co., 610 New York Bldg., St. Paul, Minn. $226,582. Bids 6/10. CD 6/6.

★†Ind., Charlestown—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., general contract brick, steel, concrete ordnance plant, Hoosier Ordnance Works, to Winston Bros. Co., C. F. Haglin & Sons, Inc., Missouri Bridge & Iron Co. and Sollitt Constr. Co., Charlestown. Est. $20,000,000. Shreve, Anderson & Walker, Marquette Bldg., Detroit, Mich., archts. and engrs.

★Ind., Jeffersonville—Con. Q.M., administration building and garage, to G. H. Rommell Co., 958 Logan St., Louisville, Ky. $480,000 and $66,000 respectively. Bids 6/10. CD 6/5.

★†Ind., Union Center—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., expansion ordnance plant, to Bates & Rogers Constr. Corp., 111 W. Washington St., Chicago, Ill. $8,977,000, incl. equip. Todd & Brown, 30 Rockefeller Plaza, New York, N. Y., will operate.

★Ia., Ames—Iowa State College, general contract mens dormitory addn., to C. C. Larson & Sons, Council Bluffs, $127,300*** electrical work, to Maier Electric Co., 1401 S. 3 Ave. Minneapolis, Minn. $29,746*** plumbing, heating, to Wheatland Co., 417 1st Ave. S.E., Cedar Rapids, $72,500. Grand total $529,546. CD 6/10—ENR 6/12.

†Ky., Avon—Con. Q.M., 49 buildings for Signal Corps Depot, to Fleisher Engr. & Constr. Co., Dun Bldg., Buffalo, N. Y. $445,-371. CD 6/6—ENR 6/12, under LB.

†Md., Baltimore — Con. Q.M., Curtis Bay Ordnance Depot, administration bldg., fire house, storehouse, Ordnance Depot, to Chas. C. Sanford Co., 530 N. Fulton Ave. $169,000. Bids 6/10. CD 3/27—ENR 6/5.

★Mass., East Boston (Sta. Boston)—Boston Housing Auth., 18 Oliver St., Boston, 414 homes, Mass. 2-8 R. to John Bowen Co., Inc., 129 Newbury St., Boston, $1,564,500. Bids 5/29, awarded 6/16. CD 6/4—ENR 6/12.

†Mass., Springfield—Con. Q.M., Springfield Armory, 3 story, 60x60 ft., ell 40x60 ft. serv. ice building, Pearl and Federal Sts., to Casper Ranfer Constr. Co., 6 Newton St., Holyoke, $262,013. Bids 6/20. CD 6/10—ENR 6/12, 6/12.

★Mich., Lansing—Bd. Educ., E. D. Mills, secy., general contract brick, steel, concrete West Side High School, to Chas. R. Wermuth & Son, Cranbrook School, Job Valley Farm, Birmingham, $1,077,707***heating, plumbing, to Hickey-Shaw-Winkler, 1708 W. Lafayette St., Detroit, $226,000 *** electrical work, to Barker Fowler Electric Co., 116 E. Ottawa St., Lansing, $119,695. Grand total $1,423,400. Bids 4/28. CD 6/3—ENR 6/5. under LB.

★†Mo., Weldon Springs—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., TNT plant addn to Fraser Brace Eng. Co., Inc., 10 E. 40 St., New York, N. Y. Est. $20,000,000. Atlas Powder Co., Delaware Trust Bldg., Wilmington, Del., will operate. CD 6/16—ENR 6/19.

★†N. J., Belleville—Walter Kidde & Co., Belleville, manufacturing plant addn. for high pressure gas specialties to Walter Kidde Constructors Inc., 140 Cedar St., New York, N. Y. $990,000 land and buildings. Total est. $2,242,300 incl. equip. Defense Plant Corp. will finance. CD 6/19.

★†N. Y., Fort Hamilton—Con. Q.M., 120 Wall St., New York, overseas discharge and replacement depot and regimental chapel, to J. A. J. Constr. Co., 268 41 St., Brooklyn. $909,200. Bids 6/10. CD 6/11—ENR 6/19.

★O., Dayton—Dayton Metropolitan Housing Auth., A. S. Iddings, chn., Harries Bldg., general contract Berm St., 138 housing units, and Summit St., 139 units, to W. A. Sheets & Son, Inc., 1057 Osage St., Fort Wayne, Ind. $669,750***plumbing, to Wood Daum Co., 718 Carlisle Ave. $95,516***heating, to W. P. Schmidt Co., 1047 Philadelphia Dr. $91,207*** electrical work to Lawrence Electric Co., Inc., Zanesville, $40,945***landscaping, to Wyoming Nurseries, Wyoming, $20,847. Grand total $918,265. CD 5/23—ENR 5/29.

O., Martins Ferry—Light plant, to Klotz Constr. Co., Martins Ferry, $42,400***boilers, to Babcock & Wilcox Co., 828 N. Bway., Milwaukee, Wis., $106,239***turbine condensor, pump and switchgear, to Allis-Chalmers, 1126 S. 70 St., Milwaukee, Wis., $110,081***steel plate work, piping, to Dravo Corp., Neville Island, Pittsburgh, Pa., $102,785. Grand total $361,505. CD 5/26—ENR 5/29.

★†Pa., Midland—Beaver Co. Housing Auth., R. Bennett, chn., Monaca, defense housing development, 60 buildings for USHA, to John W. Ryan Constr. Co., Inc., 369 Lexington Ave., New York, N. Y. Est. $1,000,000. CD 6/17—ENR 6/19.

★Pa., Rankin — Allegheny Co. Housing Auth., E. J. Leonard, chn., 201 County Office Bldg., general contract, landscaping 182 unit, Hawkins Village Housing, Pa 6-3, to H. Busse, 112 Wabash Ave., Pittsburgh, $568,000***sewers, gas, watermains and plumbing, to W. N. Sauer Co., 806 Chestnut St., Pittsburgh, $130,000***heating, to Wayne Crouse, Inc., 4647 Centre Ave., Pittsburgh, $55,900***electrical work, to Devlin Electric Constr. Co., 206 Stanwix St., Pittsburgh, $24,680. Grand total $778,580. Bids 5/19, awarded 6/20. CD 5/23—ENR 5/29.

†S. C., Charleston—Yards & Docks, Navy Dpt., Wash., D. C., additional housing facilities, to Southeastern Constr. Co., 218 W. 2 St., Charlotte, N. C. $328,250.

★†Tenn., Memphis—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., quartermaster depot, to Walters & Prater, Morristown, and Mark K. Wilson Co., Loveman Bldg., Chattanooga. Total cost about $8,000,000. Schulz and Norton, Shrine Bldg., archts. and engrs. CD 6/11—ENR 6/19, under CA.

Tex., Bonham—Warehouse, rodeo pens, utilities, WPA. $85,000.

★†Tex., Houston—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., general contract, ordnance depot on ship channel, San Jacinto Battle Grounds, to Hubbard-Knutson-Mitchell, Union Natl. Bank Bldg. Est. $8,000,000. CD 4/29—ENR 5/1.

†Tex., McAllen—Farm Security Administration, Dpt. Agriculture, Wash., D. C., migratory farm labor camp, to J. J. & W. J. Hardy, Marshall. $272,396. CD 3/10—ENR 3/13.

†Tex., Waco—Quartermaster General, Wash., D. C., automotive repair unit, etc., to E. Johnson, Amicable Bldg. $42,568. Bids 5/22. CD 5/16.

★†Va., Arlington—Pub. Bldgs. Administration, Wash., D. C., office building, to McCloskey & Co., 1618 W. Thompson St., Phila., Pa. $510,777. Awarded 5/20. CD 4/16—ENR 4/24.

★†Wash., Tacoma—Dpt. Interior, Bureau Indian Affairs, Wash., D. C., Indian Hospital, to L. H. Hoffman, Couch Bldg., Portland, Ore., $983,123. Bids 6/11. CD 6/13—ENR 6/19.

Wis., Stevens Point—Portage Co., 2 story 80x208 ft., brick, steel highway garage, office building, own forces, roofing, to Breitenstein and Co., Stevens Point, plumbing, heating, ventilating, to G. Sherbert, Stevens Point. CD 4/1—ENR 4/3.

★N. S., Halifax—Secy. Dpt. P. Wks., Ottawa, Ont., torpedo and gunnery building, Naval Training Center, to Anglin-Norcross Maritime, Ltd., 892 Sherbrooke St. W., Montreal, Que. About $600,000. CD 3/7—ENR 3/13.

COMMERCIAL BUILDINGS

PROPOSED WORK

Conn., Milford — Milford Hospital, Inc., Bridgeport Ave., plans by R. H. S. Booth, Old Orchard Rd., North Haven, 3 story, bsmnt., rein.-con., hospital, $150,000. CD 2/18—ENR 2/20.

Ga., Atlanta—Beck & Gregg Hardware Co., 64 Marietta St. N. W., plans by Burge & Stevens, Palmer Bldg., 4 story, store and office. $250,000.

Ind., Indianapolis—L. Jennings Constr. Co., Wayneaire, W. Washington St., 40 or more residences, Wayneaire subdivision, $220,000 or more.

Ind., Indiannapolis — Bancroft Realty Co., Architects and Builders Bldg. 31 three-family apartments, Cancroft St. and Riley Ave. E., $185,000 or more with equip.

Md., Baltimore—West Baltimore General Hospital, Rayner and Dukeland Aves., raising funds, 3 story, 100x150 ft. hospital addn., Rayner and Dukeland Aves. $300,000.

Md., Baltimore—S. Winer, 100 N. Eutaw St., bids soon, 1 story, bsmnt., 93x137 ft., brick, steel commercial building, housing 20 bowling alleys, 4 stores, concrete fdns. $150,-000. F. E. Beall, 334 St. Paul St., archt.

Md., Baltimore—Israel Rabinical College, Garrison and Fernhill Aves., soon lets contract 2 story, bsmnt., 60x250 ft., brick, stone college, concrete fdn. $150,000. D. Harrison, 421 St. Paul St., archt.

Mass., Lynn — Lynn Hospital, S. Traner, supt., 212 Boston St., sketches by Stevens, Curtin, Mason & Riley, 45 Newbury St., Boston, brick, steel, stone hospital addn., Boston St. $350,000.

Mass., Milford—Sacred Heart of Jesus, J. J. Valentinell, pastor, 5 E. Main St., soon lets contract superstructure 1 story, bsmnt., 60x 200 ft., face brick, limestone church, E. Main St. $160,000. A. J. De Pace, 151 W. 46 St., New York, N. Y., archt. Saul Shaw & Co., 24 Walnut St., Newark, N. J., engr. CD 2/25—ENR 2/27.

Mo., Kansas City—St. Francis Seraph Congregation, c/o J. B. Shaughnessy, archt., Reliance Bldg., 2 story, bsmnt., 98x120 ft., brick, concrete school. $150,000.

Mont., Butte—St. James Hospital soon lets contract 4 story hospital. $275,000. J. G. Link & Co., Electric Bldg., Billings, engrs. CD 5/27—ENR 6/5.

★N. J., Ridgewood—Ridgewood Bergen Realty Co., 396 E. Ridgewood Ave., plans by C. K. Loveen, 119 Rock Rd., Glen Rock, 2 story, bsmnt., frame, brick veneer, residential development, S. Pleasant Ave. $500,-000.

★N. J., River Edge—Federal Development Corp., Bway., Fair Lawn, 125 two story bsmnt., frame, brick homes, residential development. $509,000.

N. J., Secaucus—C. A. Diehl, 191 Franklin St., plans by P. H. Butler, 263 Elm Ave., Teaneck, forty 2 story, bsmnt., brick veneer homes, residential development, Fairview Ave. $200,000.

★N. Y., Bellerose—Owner c/o N. K. Winston Co., 22 West 48 St., New York City, 400 residences. $1,600,000. Architect c/o owner.

N. Y., Brooklyn—N. Sokolow, 667 Crown St., plans by Kavy & Kavovitt, 44 Court St., 6 story, 133x160 ft., 1814 E. 15 St., $382,000.

N. Y., Farmingdale—Republic Aviation Corp., Farmingdale, soon lets contract administration building. $300,000. Engineer, c/o owner.

N. Y., Jamaica—James Realty Co., 90-50 Parsons Blvd., plans by M. N. Weinstein, 93 Court St., Brooklyn, 6 story apartment, 89-11 153 St. $350,000.

N. Y., Long Island City—Citadel Hall, Inc., 1914 84 St., Brooklyn, plans by Cohn Bros., 191 Joralemon St., Brooklyn, 6 story apartment, 43-30 48 St. $200,000.

★N. Y., New York—Syndicate, c/o G. S. Switler, architect., 535 E. Tremont St., three 6-story apartments on block bounded by Sedgewick Ave., Kingsbridge Terrace, 230 and 231 Sts., $800,000.

N. Y., New York—Walbern Realty Corp., 2390 Tiebout Ave., New York, 6 story, 84x125 ft. apartment, Valentine Ave. near 192 St. $200,000. I. L. Crausman, 332 E. 149 St., archt.

N. Y., Salamanca—Schine Chain Theatres, 40 N. Main St., Gloversville, soon lets contract 1 story, bsmnt., mezzanine theatre and store building, Main St. $150,000. J. Eberson, 2 W. 47 St., New York, archt. J. Ruderman, 1860 Bway., New York, engr.

★N. C., Jacksonville—Child-Lawson Co., Columbia, 200 homes. Over $700,000.

N. C., New Bern—Modern Homes Co., E. J. Neal, pres., 308 Bickett Blvd., Raleigh, 50 homes, National Ave., approx. $200,000.

O., Bay Village—A. R. Miller, 23803 Wolf Rd., 50 houses. $325,000.

O., Columbus—Byers Business Brokers, 180 N. High St., twelve 2-story, 4-family, brick, concrete apartment buildings, Leonard and E. Fifth Aves. west of Sunbury Rd. $192,000. W. T. Mills, 152 S. Garfield Ave., archt.

Pa., Hellertown—Sears, Roebuck & Co., c/o M. C. Juell, mgr., in charge, Hellertown, 61 dwellings, housing. $250,000-$300,000.

Tex., Dallas—H. I. Freedman, Kirby Bldg., brick, steel bowling alley building. $185,000.

BIDS ASKED

Bids Asked June 30

Me., Portland—Edw. T. P. Graham, archt., 171 Newbury St., Boston, Mass., constructing Mercy Hospital, 6 story, 48x126 ft. with 5 story, 46x126 ft., brick, limestone, granite, concrete fdn., for Roman Catholic Diocese of Portland, c/o architect. $400,000. CD 6/16—ENR 6/19.

Bids Asked July 2

★O., Oberlin—Oberlin College, R. Cutler, supt. constr., 3 story, 58x222 ft., brick, steel, concrete physics laboratory, $325,000; 3 story, 86x210 ft. biology building, $250,000. E. J. Schulte, 920 E. McMillen St., Cincinnati, archt. J. P. Jones, Cary & Miller, Terminal Tower, Cleveland, engrs. CD 5/28—ENR 6/5.

Ont., Toronto—S. B. Coon & Son, archts., 989 Bay St., 58x278 ft., cinder block, concrete temporary building, University Ave., for Y.M.C.A., Central Branch, 36 College St., $150,000.

Bids Asked About July 10

Mo., Springfield—St. John's Hospital, Springfield, hospital addn. $200,000. Johnson & Robinette, Springfield, archts. CD 2/18—ENR 2/20.

Bids Asked About July 15

Wis., Ripon—Ripon College, union building. $175,000. Auler, Jensen & Brown, Oshkosh, archts. CD 6/3—ENR 6/5.

CONTRACTS AWARDED

Calif., Daly City—R. Mohr & Sons, 22 Ocean Ave., San Francisco, 1 story, bsmnt., wood frame residences, day labor. Total expenditure over $150,000.

Calif., Oakland — G. W. Linton, c/o contractor, 1 story, wood frame residences, separate garages, vicinity Jordan Rd., to P. J. Spaulding, 1511 Union St., Alameda. Est. over $150,000.

Calif., Palo Alto—B.P.O.E., Palo Alto Lodge 1471, rein.-con. club house, tennis and soft ball courts, swimming pool, etc., separate contracts. $150,000. CD 6/3—ENR 6/5.

Calif., Redwood City—D. Holder, 194 Nevada St., 1 story, wood frame residences, various sections San Mateo Co., day labor. Over $150,000.

Calif., Richmond—C. M. MacGregor, 1391 Solano Ave., Albany, 1 story wood frame homes, day labor. Over $150,000.

Calif., San Francisco—Superior Bldg Co., 1662 27 Ave., 1 story, wood frame residences, vicinity Robbles and Thomas Aves., day labor. Est. over $150,000. B. K. Dobkowitz, 425 Montgomery St., archt.

Calif., San Mateo—H. A. Thomas, Jr., archt., 316 Montgomery St., San Francisco, 1 story, bsmnt., rein.-con. telephone exchange, for Pacific Telephone & Telegraph Co., Telephone Bldg., San Francisco, to Dinwiddie Constr.

COMMERCIAL BLDGS. (Contracts Awarded, Cont'd.)

Co., Crocker Bldg., San Francisco, **$150,000.** Bids about 6/18. CD 6/10—ENR 6/12.

Ga., Columbus—Southern Bell Telephone & Telegraph Co., Hurt Bldg., Atlanta, dial telephone building, to Barge Thompson Co., 136 Ellis St., N.E., Atlanta. Est. **$300,000.** CD 4/10—ENR 4/17.

Ill., Bloomington — Mennonite Hospital, Bloomington, hospital and nurses home addn., to G. J. Skinner, 504 N. Prairie St., Bloomington. Est. **$160,000.** P. Swern, 19 S. LaSalle St., Chicago, archt.

Ia., Ottumwa—Ottumwa Theatre Co., Ottumwa, theatre, to Kucharo Constr. Co., 1901 Easton Blvd., Des Moines. **$150,000.**

Mass., Forest Hills (Boston)—St. Andrews Parish, Rev. Patrick Duncan, 40 Walk Hill St., Jamaica Plain (Boston) 3 story, bsmnt., concrete brick, stone school, to J. J. Pavers Co., 238 Main St., Cambridge, about **$150,000.** R. Shaw, 25 Huntington Ave., Boston, archt.

N. J., Jersey City—St. Peters College, 144 Grand St., Jersey City, 3 story, bsmnt., brick, limestone high school, Grand St., to Censullo Burke Constr. Co., 613 15 St., Union City. F. Ricker & L. Axt, 6115 Hudson Ave., West New York, archts.

N. Y., New Hyde Park—J. Greenman, New Hyde Park Rd., residential community, 85 homes, New Hyde Park Rd. Owner builds. **$425,000.**

★**N. Y., New Hyde Park**—Pilgrim Estates, Winthrop St. and Hillside Ave., residential community, 215 homes, New Hyde Park Rd. Owner builds, **$1,000,000.**

★**N. Y., New Hyde Park**—Kraus & L. Jacoby, 159-15 Northern Blvd., Flushing, 250 homes, New Hyde Park Rd. Owner builds. **$1,250,000.**

N. Y., New York—Roman Catholic Parish of Immaculate Conception, 389 E. 150 St., 2 story, 60x232 ft. school addn., 151 St. near Melrose Ave., to Leopold Neckermann, Inc., 205 E. 42 St. Est. **$200,000.** Eggers & Higgins, 642 5 Ave., archts.

N. Y., New York—Churchill Land Corp., 750 Grand Concourse, 6 story, 89x110 ft. apartment, 3561 Amsterdam Ave. **$200,000,** and 6 story 84x135 ft. apartment, 110 Laurel Hill Terrace, **$200,000,** separate contracts. CD 6/9—ENG 6/12.

Pa., Phila.—J. M. Zerbey, 5909 N. Broad St., 46 residences. Owner builds. Over **$150,000.**

Pa., Pittsburgh—E. Lamar Miller, 603 Greenfield Ave., 1½ story, bsmnt., 27x27 ft., brick, veneer residences, North Versailles Twp., near here. Separate contracts. **$405,000.**

Pa., Sewickley—Valley Hospital, W. Campbell, pres., Blackburn and Locust Sts., 8 story, bsmnt., 43x52 ft., brick on hollow tile backup, to F. Hoffman Co., 901 Wood St., Wilkinsburg. L. Stevens, Century Bldg., Pittsburgh, archt.

INDUSTRIAL BUILDINGS

PROPOSED WORK

Calif., Berkeley—WAREHOUSE—F. Cohn, Ashby and San Pablo Aves., 1 story warehouse. $42,500. R. H. Cooley, 354 Hobart St., Oakland, engr.

Calif., Berkeley — WAREHOUSE — West Coast Kalsomine Co., 720 Grayson St., warehouse units. $40,000.

Calif., Livermore—WINERY—Schenley Distilleries, Inc., 900 Battery St., San Francisco, Cresta Blanca Winery imprvs. and addn. $250,000.

Calif., Los Angeles—WAREHOUSE—Owner, c/o A. C. Martin, 233 Higgins Bldg., Los Angeles, rein.-con. warehouse, Jefferson Blvd. and Hope St. Over $40,000. R. V. Labarre, W. 5 St., to engineer foundation work.

Calif., Oakland — FACTORY — American Forge Co., 750 Potter St., completing plans 1 story factory. $45,000.

Calif., Oakland — PLANT — Haws Drinking Fountain Co., 1808 Harmon St., San Francisco, plant addns. $40,000.

Calif., Palo Alto—PLANT—Gold Seal Creamery, 423 University Ave., plans being completed by W. H. Toepke, 74 New Montgomery St., San Francisco, 2 story, rein.-con. creamery plant. Over $40,000.

Calif., San Francisco—CANNERY—Farallone Packing Co., Pier 92, 2 story, wood frame cannery. $40,000.

Calif., San Francisco—PLANT—A. Carlisle & Co., Upham and Rutledge, Inc., 135 Post St., plans being completed by **F. Meyer, Kohl** Bldg., 2 story, rein.-con. printing plant. $275,000.

Calif., San Francisco—PLANT—Kellogg Express & Drayage Co., 279 Spear St., plant expansion. Over $40,000.

Calif., San Francisco — FACTORY — Eitel-McCullough, Inc., San Bruno, completing plans rein.-con. factory addn. Over $40,000.

Calif., San Francisco — FACTORY — United States Plywood Corp., lessees, 119 Kansas St., rein.-con. factory. $100,000.

Calif., San Francisco — FOUNDRY — Greenberg Sons, Alice and Folsom Sts., foundry reconstructing, addns. $40,000.

Calif., San Francisco — GARAGE — Belle Haven Realty Co., 1182 Market St., plans by B. J. Joseph, 631 O'Farrell St., 1 story, rein.-con. garage. $40,000.

Calif., San Francisco — PLANT — Pacific States Oil Co., W. 6 St., Los Angeles, plant addns. and reconstruction. $40,000.

Calif., San Francisco — PLANT — American Lubricants Co., 1525 Folsom St., plant expansion. $45,000.

Calif., San Jose—WAREHOUSE—Barron Gray Cannery, 5 and Martha Sts., warehouse addns. $40,000.

Conn., Hamden (br. New Haven)—WAREHOUSE, etc.—P. Ballantine & Sons, 975 Dixwell Ave., brick, steel warehouse, garage and office. $50,000. Mylchreest & Reynolds, 238 Palm St., Hartford, engrs.

Conn., Hartford—GARAGE—Southern New England Telephone Co., 227 Church St., New Haven, 1 story, 70x180 ft., brick, steel concrete service garage, Albany Ave. $55,000. R. W. Foote, 157 Church St., New Haven, engr.

Del., Wilmington — PLANT — Mentholatum Co., West St., soon lets contract 2 story, 40x140 ft. plant. Over $40,000 with equip. G. M. Whiteside, du Pont Bldg., archt. CD 6/19.

Fla., Tampa—STORAGE PLANT, etc.—Lee & Pomeroy, Inc., 13 and Twiggs Sts., gasoline storage plant and service stations. $60,000.

Ia., Charles City—POWER PLANT—Iowa Pub. Serv. Co., Waterloo, imprv. power plant, new boiler, switchgear. $200,000.

★**La., Sterlington** — PLANT — Commercial Solvents Corp., J. P. Walker, pres., 17 E. 42 St., New York, N. Y., ammonia manufacturing plant. $10,000,000.

Md., Baltimore — GARAGE — Martin Bros., 2300 N. Monroe St., bids soon, rebuilding 2 story, 100x250 ft., brick, stone garage and showroom. $150,000.

Md., Baltimore — GARAGE, etc. — George Transfer Co., 1731 Russell St., 1 story, 50x100 ft., brick, steel garage and office, concrete fdn. $80,000.

Md., Baltimore—WAREHOUSE, etc. — Tolchester Co., 16 Light St., rebuilding 40x100 ft. warehouse and pier. $70,000.

Mass., Lowell—BOTTLING PLANT—Lowell Coca Cola Co., Inc., 682 Aiken St., sketches 1 and 2 story, brick, steel bottling plant, Middlesex St. $40,000.

Minn., Owatonna—FACTORY—Josten Mfg. Co., Owatonna, plans by D. J. C. Parsons, 700 Foshay Tower, Minneapolis, 1 and 2 story, 81x95 ft. factory addn. Over $40,000.

Minn., Winona—BAKERY—Federal Bakery Winona, bakery addn. $40,000.

★**Miss., Laurel**—POWER PLANT—Masonite Corp., Laurel, plant imprvs., 13,500 kw. steam turbine power plant. $1,500,000.

Neb., Omaha—PLANT—Socony-Vacuum Oil Co., E. G. Kendricks, genl. mgr., Federal Reserve Bldg., Kansas City, Mo., soon lets contract, lubricating oil compounding plant, 16 and Perry Sts. CD 3/28—ENR 4/3.

★**N. J., North Bergen**—FACTORY—E. J. Kahn and R. A. Jacobs, archts., 2 Park Ave., New York, N. Y., soon lets contract 1 and 2 story, bsmnt., 300x800 ft., brick, steel factory and office building, $750,000, for Grand City Container Corp., 622 W. 57 St., New York, N. Y. CD 5/12—ENR 5/15.

N. Y., Bolivar — WAREHOUSE — R. B. Moore, Bolivar, warehouse, distr. center building. Over $40,000 with equip.

N. Y., Brooklyn—SHIPPING SHED, etc.—Bus Terminal Co., 100 Broad St., New York, plans by Wm. Higginson & Son, 101 Park Ave., New York, altering 1 and 6 story, shipping shed and receiving platform, 51 St., near 1 Ave. $40,000.

N. Y., Falconer — WAREHOUSE — G.L.F. Service, Inc., M. Aiken, in charge, E. Everett St., warehouse, store and distr. center, E. Everett St. $40,000 with equip.

N. Y., New York—STORAGE, etc.—Decatur 195 St. Corp., 250 W. 57 St., plans by J. M. Felson, 250 W. 57 St., 3 story, 75x100 ft. storage and stores, Bway. near Spuyten Duyvil Parkway. $40,000.

N. Y., Rochester—FACTORY—Bond Clothes, Inc., Martin St., plans by S. Firestone & E. M. Lorscheider, archts. and Engineers Associates, archts. and engrs., 59 South Ave., clothing factory. $350,000.

N. Y., Yonkers — WAREHOUSE — Refined Syrups Sales Corp., warehouse. Over $40,000.

★**O., Canton**—PLANT—Republic Steel Corp., Republic Bldg., Cleveland, two 50 ton electric furnaces. $500,000.

O., Cleveland—FACTORY—Cleveland Chain & Mfg. Co. D. L. Round, pres., Henry Rd., 1 story, 40x80 ft. and 2 stories 40x90 ft. and brick, steel factory addns. $40,000. E. G. Hoefler, 5005 Euclid Ave., engr.

O., Cleveland—FACTORY—McKinney Tool Co., E. McKinney pres., 1688 Arabelle Ave., 1 story, 85x170 ft., brick, steel factory addn. $50,000. E. G. Hoefler, 5005 Euclid Ave., engr.

O., East Palestine—PLANT—W. S. George Pottery Co., East Palestine, bids about 30 days, continuous kiln, No. 4 Plant. $40,000.

O., Hamilton—PLANT—Herring-Hall-Marvin Safe Co., Grand Blvd., plant addn. $300,000.

O., Kent — POWER PLANT — Twin Coach Co., Kent, bids 30 days, power plant, new boiler room. $40,000. CD 2/14—ENR 2/20.

O., Sandusky — PLANT — Sandusky Metal Products Co., Sandusky, bids about 30 days, plant addn. $40,000-$50,000.

O., Springfield—TESTING LABORATORY—National Supply Co., 1401 Sheridan Ave., Springfield, new research and testing laboratory. $125,000.

Pa., Clearfield—PLANT—Harbison-Walker Refractories Co., A. H. Munro, dist. supt., Clearfield and Farmers Bldg., Pittsburgh, brick plant. Over $65,000.

Pa., Corry—FACTORY—**Aero** Supply Mfg. Co., Inc., 611 W. Main St., bids soon, 1 story, 70x125 ft. factory top addn. Meyers & Johnson, 821 Commerce Bldg., Erie, archts.

Pa., Erie—WAREHOUSE—Erie Corrugated Box Co., 922 Bacon St., warehouse, 110 and Bacon Sts. $40,000.

Pa., Pittsburgh — FURNACE — Jones & Laughlin Steel Corp., W. A. Morris, purch. agt., 3 and Ross St., furnace building exter., 2nd Ave. $50,000. C. W. Littler, 3 and Ross Sts., co. ch. engr.

Pa., Plymouth — PLANT — Owner c/o Wyoming Valley Industrial Comm., Wilkes-Barre, 1 story fireproof textile product plant, site of old West Stocking Mill. $40,000.

R. I., Providence—FACTORY—Armour & Co., Union Stock Yards, Chicago, Ill., plans by F. A. Lindberg (constr. dpt. owners), 1 story, bsmnt., 130x240 ft. sausage factory and branch meat house. $200,000.

Tex., College Station—WAREHOUSE—A. M. Waldrop, College Station, bids soon, 1 story structural steel, brick, stone warehouse. $40,000. W. E. Nash, Bryan, archt.

Tex., Dallas—STORAGE STATION—Sinclair Oil Co., South Lamar St., new oil storage station and oil and products docks. $100,000.

Tex., Donna—PLANT—Taormina Corp., cor. 9 St., Donna, 1 story meat processing plant. About $40,000.

Tex., Fort Worth—PLANT—Quality Mfg. Co., 1104½ Jennings St., 1 story 100x256 ft. manufacturing plant. $60,000. E. T. Glasgow, Insurance Bldg., Fort Worth, archt.

★**Tex., Gilmer**—GENERATING PLANT, etc.—Farmers Electric Generating Co-operative, Inc., c/o S. Seagles, Gilmer, generating plant and 300 mi. rural lines, 9 substations. 6,000 kw. power plant. $1,500,000. Freese & Nichols, Capps Bldg., Fort Worth, engrs. CD 4/2—ENR 4/17.

Tex., Houston — WAREHOUSE — Western Electric Co., 1008 Roberts St., warehouse, on 3 acre site. $60,000.

Tex., Houston—WAREHOUSE—J. B. Greenfield, Esperson Bldg., 2 story, rein.-con. warehouse. $45,000.

Tex., Houston — WAREHOUSE — Western Electric Co., 1008 Roberts St., steel, concrete warehouse, Lockwood and Critz Sts. $70,000.

Va., Norfolk—WAREHOUSES—Southgate Terminal Corp., D. M. Thornton, pres., foot W. Tazewell St., 2 warehouses. $75,000.

Wash., Bremerton—WAREHOUSE—Parker Lumber Co., Sixth Ave. and Pacific St., warehouse. $40,000.

★**Wash., Seattle**—LABORATORY—Carlisle Lumber Co., 5910 W. Marginal Way, 1 story, 22x77 ft. laboratory, 1st unit in plant which eventually well include machine shop, boiler room, calcining and whetlerite bldgs. $1,300,000. Marshall & Barr, Exchange Bldg., engrs.

Wis., Ladysmith—PLANT—Ladysmith Milk Producers Co-operative Assn., Ladysmith, soon lets contract creamery addn. $75,000. Klinger & Hubbard, 218 S. Barstow St., Eau Claire, archts. CD 6/5.

Ont., Kitchener—PLANT—J. M. Schneider Ltd., Courtland Ave. E., soon lets contract 4 story, 76x88 ft., brick, concrete packing plant addn. $85,000. J. C. Klaehn, 49 King St. E., archt. CD 3/17—ENR 3/20.

BIDS ASKED

Bids Asked About July 1

N. J., Clifton and **Nutley**—CHEMICAL—Hoffman LaRoche, Inc., Kingsland Rd., Nutley, three 2 and 2½ story, bsmnt., brick, steel chemical mfg. buildings, Kingsland Rd. Fellheimer & Wagner, 155 E. 42 St., New York, N. Y., archts.

Bids Asked

Calif., Los Angeles—WAREHOUSE—L. A. Brewing Co., 1910 N. Main St. (selected list bidders), 1 story, reinforced brick warehouse, rein.-con. fdn., 700 Moulton Ave. $62,000. L. A. Parker, 814 Architects Bldg., archt.

★**La., Lake Charles**—PLANT—Mathieson Alkali Wks., Lake Charles, plant addn. $6,500,000.

N. J., Passaic—FACTORY—B. Fillippone & Co., 312 Oak St., 3 story, part bsmnt., 54x80 ft., brick, steel factory addn., Oak St. L. F. Caproni, 1221 Chapel St., New Haven, Conn., archts.

N. Y., Lackawanna—TANK SHOP—Snyder Mfg. Co., Hamburg Turnpike, 60x160 ft. tank shop. $40,000 with equip. M. C. Snyder, in charge.

N. Y., Long Island City—FACTORY, etc.—J. M. Baker, archt., 24-16 Bridge Plaza, 1 story factory, and 1½ story office bldg. 75x125 ft. site, 39 Ave. and 24 St., for Acco Products, Inc., 24-02 39 Ave. $45,000. Revised plans. Bids 3/21 rejected. CD 3/13—ENR 3/20.

Pa., Clairton—POWER PLANT—etc.—Carnegie Illinois Steel Co., Carnegie Bldg., Pittsburgh, 1 story, 82x50 ft., brick, steel tar plant and utility building. $60,000. Bids June 2 rejected. M. W. Reed, Carnegie Bldg., Pittsburgh, company's ch. engr. CD 5/28—ENR 6/5

Pa., York—SUPER MARKET—American Stores Co., 424 N. 19 St., Phila., 1 story

INDUSTRIAL BLDGS. (Bids Asked, Cont'd.)

50x130 ft., brick, steel, concrete super market, Ridge Ave. $40,000. CD 5/15—ENR 5/29.

★**Tex., Corpus Christi**—PLANT—American Smelting and Refining Co., 120 Bway., New York, N. Y., shop, 2 warehouses, office and laboratory for electrolytic zinc refining plant. About $275,000. Total est. $5,200,000.

LOW BIDDERS

Que., Montreal — WAREHOUSE — Imperial Tobacco Co. of Canada, Ltd., 3710 St. Antoine St., 1 story, 111x522 ft. warehouse, from W. W. Stewart, 1440 St. Catherine St. W. About $400,000. CD 6/13—ENR 6/19.

CONTRACTS AWARDED

Calif., Berkeley—MACHINE SHOP—L. H. Nishkian, engr., 525 Market St., San Francisco, 1 story, 100x200 ft., rein.-con. and wood frame machine shop addn., to H. H. Larsen Co., 64 South Park, San Francisco, for Autometric Machine Tool Co., Dwight Way and 9 St. Over $50,000. CD 6/18—ENR 6/19.

Calif., Berkeley—FACTORY—Pan American Eng. Co., 820 Parker Ave., 1 story, concrete factory, to Fox Bros., 1748 University Ave. $46,000.

Calif., Compton—SERVICE—Southern California Gas Co., 810 S. Flower St., Los Angeles, 2 story, 65x95 ft., rein.-con. service building, to Campbell Constr. Co., 5388 Alhambra St., Los Angeles. $57,256. Taylor & Taylor, 803 W. 3 St., Los Angeles, archt.

Calif., Oakland—GARAGE—B. S. Booth, 275 Euclid St., Oakland, 1 story, brick, garage addn., to Parsons & Williams, 3807 Mario Ave. $40,000. E. T. Foulkes, 357 12 St., archt.

Calif., San Francisco—WAREHOUSE—E. C. Bothin, 604 Mission St., 1 story, rein.-con. warehouse, to A. F. Mattock Co., 212 Clara St. $45,000. E. M. Sharpe, archt., and A. P. Fisher, engr., both 111 Sutter St.

Calif., San Francisco—CANNERY — Cypress Fisheries, Inc., Pier 42, 1 story, wood frame cannery, day labor. $42,500.

Calif., Vernon (br. Los Angeles)—FACTORY—Kurtzman Bros., 4529 E. 49 St., Los Angeles, brick factory, Magnolia St., to Wm. P. Neil Co., 4814 Loma Vista St., Los Angeles. Est. $65,000. H. T. Miller, 4814 Loma Vista St., Los Angeles, archt.

Colo., Denver—WAREHOUSE, etc.—Union Pacific R. R. 1416 Dodge St., Omaha, Neb., B. H. Prater, ch. engr., 1 story, 208x326 ft. warehouse, 1 story, 72x201 ft. baking plant, 1 story, 60x126 ft. store, all concrete, brick, to F. J. Kirchhof Constr. Co., 700 Lawrence St., $169,865. Miller's Market, 15 and Lawrence Sts., lessee. R. L. Linder, Insurance Bldg., archt.

Conn., New Haven—LAUNDRY — Majestic Laundry Co., 63 Lock St., 2 story, brick, steel laundry addn., Lock St., to Mott-Mohr Constr. Co., Inc., 440 Elm St. Est. $55,000. J. Weinstein, 100 Lowin Ave., engr.

Conn., Stamford—FACTORY—Thomas Mason Co., Inc., Sunnyside Ave., 1 story, 90x200 ft. and 40x50 ft. plant, 2 story, 40x75 ft. office, to W. J. Lyons, 7 Mechanic St., Norwalk. Est. $100,000. CD 6/17—ENR 6/19.

Conn., Torrington—TRUCK TERMINAL, etc.—Blake Motor Lines, Inc., 740 Main St., 1 story, 100x135 ft., brick, steel, rein.-con. truck terminal-freight depot, 35x100 ft., brick, steel, rein.-con. platform, to Paganini & Co., 24 E. Main St. Est. $50,000. CD 6/13—ENR 6/19.

Conn., Willimantic — BOTTLING PLANT — Coca Cola Bottling Co., 16 Watson St., 1 story, 90x160 ft., brick, steel, concrete bottling plant, Main St., to Rowley Constr. Co., 260 Central Ave., Pawtucket, R. I. Est. $50,000. CD 6/3—ENR 6/5.

Ill., Chicago — FACTORY — Chicago Screw Co., 1026 S. Homan Ave., 6 story, 110x125 ft. factory addn., to F. Collins, 1026 S. Homan Ave. Est. $250,000. J. B. Fischer, 7322 S. Lafayette Ave., archt.

Ill., Chicago — FACTORY — Industrial Gear Mfg. Co., 4539 W. Van Buren St., 1 story, 75x125 ft. factory addn., to Goodwin Constr. Co., 320 S. Spaulding Ave. Est. $40,000.

Ill., Kewanee—PLANT—Coca Cola Bottling Co., Kewanee, bottling plant, to O. W. Schneider, Kewanee. $45,200. J. A. Scribbins, Kewanee, archt.

Ill., Rockford—FACTORY—Greenlee Bros. & Co., 2136 12 St., factory addn., to Security Building Co., 717 E. Jefferson St. $40,000, incl. equip. R. D. Wood, Melrose Park, engr.

Md., Baltimore—MANUFACTURING—Levar Bros. Co., 5300 Holabird Ave., manufacturing building, to Stone & Webster, Eng. Corp., 49 Federal St., Boston, Mass. Est. $250,000.

Mass., Quincy — PLANT — White Bros., 50 French St., 2 story, bsmnt., 68x78 ft., milk plant, to Groisser & Shlager Iron Wks., 84 Washington St., Somerville. Est. $100,000 incl. equip. CD 6/6—ENR 6/12.

Miss., Greenwood — PLANT — Choctaw Culvert & Mchy. Co., 491 S. 2 St., Memphis, Tenn., concrete pipe manufacturing plant. Owner builds. $75,000.

N. J., Bound Brook—WAREHOUSE, etc.—Bakelite Corp., 247 Park Ave., New York, N. Y., warehouse and machine shop addns., and warehouse, River Rd., to Turner Constr. Co., 420 Lexington Ave., New York, N. Y. Est. $200,000. CD 5/19—ENR 5/22.

N. J., Newark—FACTORY—Baker & Co., Inc., 113 Astor St., 3 story, 50x100 ft., brick, rein.-con. platinum factory, Astor St., to Winninger Selby & Herrick, Inc., 152 W. 42 St., New York, N. Y. $80,000. Epple & Kahrs, 17 Washington St., Newark, archts. and engrs.

N. J., Plainfield—NEWSPAPER—Plainfield Courier-News 226 Park Ave., 2 and 3 story, bsmnt., brick, steel newspaper building, 2 St., to Wigton-Abbott Corp., 1225 South Ave. $200,000.

N. Y., Binghamton—BOTTLING PLANT—Pepsi-Cola Bottling Co. of Binghamton, 286 Main St., 100x170 ft., bottling plant, to E. Muller, 217 East Ave., Rochester. Est. $40,000. C. S. Barrows, 217 East Ave., archt. CD 6/12—ENR 6/19.

N. Y., Jamestown—FACTORY—Crawford Furniture, Inc., C. Crawford, pres. and mgr., Allen St. exten., exten., altering, imprv. 4 story, bsmnt. furniture factory, separate contracts. $40,000. CD 6/10—ENR 6/12.

N. Y., Rochester—PLANT—Eastman Kodak Co., C. H. Brown, in charge, Kodak Park, 4 story, 96x196 ft. plant addn., to A. W. Hopeman & Sons Co., Lyell Ave. Est. $400,000.

O., Canton—PLANT—Republic Steel Corp., 8 St. N. E., 1 story, brick, steel, concrete factory addn., to B & H Constr. Co., Massillon. $45,000. Awarded 6/12.

★**O., Canton**—BOILER HOUSE, etc.—Timken Roller Bearing Co., 1835 Dueber Ave. S.W., 60x96 ft. boiler house, 75 ft. high, Clark Ave. and 20 St. incl. water treating sys. and 1 story, 200 ft. square brick, steel plant, to Gibbons-Grable Co., Mellett Bldg. $500,000 incl. equip. and $90,000 excluding equip. respectively. CD 5/7—ENR 5/15.

O., Cleveland — FACTORY, etc. — Tool & Gages, Inc., J. A. Salzer, pres., 3106 E. 63 St., 1 story, 45x100 ft., brick, steel factory and office addn., to Arthur Thomas, 2488 E. 127 St. Est. $40,000. CD 6/11—ENR 6/19.

O., Columbus—FACTORY—Walter T. Dickerson Shoe Co., 326 S. Front St., 1 story, 40x80 ft. factory addn., to Charles Matter, 2549 Beulah Rd. $40,000. Awarded 6/18.

O., Conneaut—MILL, etc.—Conneaut Grain & Fuel Co., R. C. Phelps, pres., 1 story, brick, steel, concrete mill and warehouse addn., Broad St., separate contracts. $40,000 with equip. CD 6/13—ENR 6/19.

Pa., Bellefonte—PLANT—Titan Metal Co., Bellefonte, 1 story, brick, steel, concrete metal product plant addn., separate contracts. $190,000 with equip. CD 5/21—ENR 5/29.

Pa., Bethlehem—PLANT—Coca Cola Bottling Co. of Pennsylvania, Bethlehem, 230x250 ft. bottling plant, to R. S. Herzog, 1505 Race St., Phila. Est. $150,000.

Pa., Corry — PLANT — Meyers & Johnson, archts., 281 Commerce Bldg., Erie, 1 story, 80x125 ft., brick, steel factory, for Precision Products Co., Inc., S. J. Irvine, pres., to J. C. Peterson, Jamestown, N. Y.; sprinklers, to Automatic Sprinkler Corp. of America, 304 Curtiss Bldg., Delaware Ave., Buffalo, N. Y. Total est. $40,000. Bids 6/13. CD 6/3—ENR 6/5.

★**Pa., Erie**—POWER PLANT TURBINE—Erie Lighting Co., 20 W. 10 St., B. M. Kirsch, genl. mgr., turbine for power plant addn., Lawrence Park, near here, to General Electric Co., Erie Works, E. Lake Rd. Total est. $2,500,000 with equip.

Pa., Erie—FACTORY—Lord Mfg. Co., 1635 W. 12 St., 1 story, 120x185 ft., brick, steel, concrete factory addn., to H. Platt Co., 922 Raspberry St. Est. $40,000. CD 6/11—ENR 6/19.

Pa., Lewisburg—WAREHOUSE—C. Dreisbach's Sons Co., E. Moyer, pres., Lewisburg, rebuilding 3 story, bsmnt. hardware warehouse and store, to Boyer Constr. Co., Northumberland. Est. $80,000. CD 5/27—ENR 6/5.

Pa., Mt. Holly Springs—PLANT—Schweitzer Paper Co., Mt. Holly Springs, altering, remodeling plant, constructing addn., separate contracts. $100,000 with equip.

Pa., Oil City—PLANT—Oil City Tank & Boiler Co., Oil City, altering, imprv. plant, purchasing, installing new tube mill, etc., separate contracts. Over $40,000. CD 6/19.

Pa., Phila.—TERMINAL — Trucking Estate, Inc., 1700 Frankford Ave., 85x185 ft. and 28x140 ft. motor express terminal, to Lauter Constr. Co., Otis Bldg. $50,000. Ballinger Co., 105 S. 12 St., archts. and engrs.

Pa., Phila.—TRUCK—Atlantic Refining Co., 260 S. Broad St., 103x135 ft. and 59x73 ft. truck building, to Lauter Constr. Co., Otis Bldg. Est. $55,000. L. M. Goldsmith, ch. engr.

Pa., Williamsport—BAKERY—F. Rianhard, archt., Masonic Temple, 2 story, 25x218 ft. bakery, for Stroehmann Baking Co., 353 Washington Blvd., to Lundy Constr. Co., 1896 W. 4 St. Est. $40,000. CD 3/11—ENR 3/13.

R. I., Providence—BUS TERMINAL, etc.—Brothers Realty Co., C. Rudginsky, 113 Stanford St., Boston, Mass., 1 story, 102x132 concrete, brick bus terminal and garage, to Dimreo Constr. Co., 75 Westminster St. Est. $50,000, incl. equip. Barker & Turoff, 1022 Grosvenor Bldg., archts. and engrs. CD 4/23—ENR 5/1.

R. I., Providence—FACTORY—Michael A. Traficante & Sons, archts., 20 Delain St., 1 story, bsmnt., 120x260 ft., brick rein.-con. factory, Dexter St., for Dexter Corp., 30 Fairview St., Edgewood, to A. F. Smiley Constr. Co., 308 Main St., Pawtucket. Est. $125,000. CD 6/5—ENR 6/12.

Tex., Brownsville — PLANT — Cocoa Cola Bottling Co., T. H. Sweeny Brownsville, 2 story, 100x120 ft., brick, steel bottling plant, to G. Hamlink Constr. Co., Brownsville. $40,000.

Tex., Lubbock—WAREHOUSE—J. Telford, Ave. G and 18 St., 1 story, 125x178 ft., brick, hollow tile, stucco warehouse, force account. $60,000. Walker & Atcheson, Lubbock, archts.

Tex., Mercedes—PLANT—Graf Packing Co., Shawnee, Okla., meat packing plant, etc., force account and sub-contracts. About $68,000. CD 6/13—ENR 6/19.

Utah, Ogden—GRAIN ELEVATOR—Farmers Grain Co-operative, Inc., grain elevator, concrete, etc., to Chalmers & Borton, Hutchinson, $150,000.

Wash., Tacoma — FACTORY — Philadelphia Quartz Co., Sixth and Grayson Sts., Oakland, Calif., sodium silicate factory, 1202 Taylor Way, to Christensen & Lyons, 1202 Taylor Way, Tacoma. Est. $50,000.

Wis., Astico—WAREHOUSE—Stokely Bros. & Co., 941 N. Meridian St., Indianapolis, Ind., 1 story, 50x108 ft. warehouse and 30x50 ft. wing, 30x36 ft. platform, brick, steel, to A. E. Hutter Co., 600 Madison St., Beaver Dam. A. Kuenzli, Watertown, engr.

Wis., Beloit—WAREHOUSE—Freeman Shoe Corp., 300 St. Paul Ave., Beloit, 4 story, bmnt., 52x120 ft. warehouse addition, to Cunningham Bros., 359 E. Grand Ave. Est. over $100,000. CD 6/18.

Wis., Genoa—PLANT—Tri State Power Co-operative, LaCrosse, 1 and 3 story, 100x200 ft., brick, rein.-con. power plant addn., to L. G. Arnold, Inc., & F. J. Robers Constr. Co., Eau Claire. $127,721. CD 5/9—ENR 5/15.

Wis., Kimberly — STORAGE — Kimberly Clark Corp., Neenah, 1 story, 67x160 ft. storage building, to Fluor Bros. Constr. Co., 48 Otter St., Oshkosh. CD 5/14—ENR 5/22.

★**Wis., Milwaukee**—FACTORY—Falk Corp., 3001 W. Canal St., 1 story, 180x475 ft. and 2 story, 40x200 ft., brick, steel factory addn., office and locker room bldg., to Klug & Smith Co., 111 E. Wisconsin Ave. Est. $900,000. CD 6/19.

Wis., Oshkosh—FACTORY—Wisconsin Axle Co., 567 High St., geneal contract 1 and 2 story, 70x180 ft. factory addn., to B. B. Ganther Co., 78 State St. Est. $60,000. CD 5/27—ENR 6/5.

Wis., Ripon — FACTORY — Barlow & Seelig Mfg. Co., Ripon, 1 story, 64x128 ft. and 30x60 ft. factory addn., brick, steel, rein.-con., to Denbrook Connstr. Co., Ripon. R. A. Sutherland, 259 E. Wells St., Milwaukee, archt.

Wis., Stevens Point — POWER HOUSE — Whiting-Plover Paper Co., Stevens Point, 3 story, bsmnt., 32x52 ft. powerhouse addn., to C. R. Meyer & Sons Co., 50 State St., Oshkosh. Helmick, Edeskuty & Lutz, 412 Essex Bldg., Minneapolis, Minn., engrs.

Wis., Superior—PLANT—King Midas Co., Superior, 400,000 bu. milling plant addn., to Barnett & Record Co., 429 N. 5 St. CD 6/11—ENR 6/19.

B. C., Vancouver—WAREHOUSE—Canadian Industries, Ltd., C. I. L. House, Montreal, Que., 1 story, 120x125 ft. chemical storage warehouse, frame walls, concrete fdn., to Armstrong & Montelth Constr. Co., Ltd., 1383 Hornsby St., about $40,000. McCarter & Nairne, 355 Burrard St., archts.

Ont., Hamilton — PLANT — Canadian Westinghouse Co. Ltd., 288 Sanford St., N., part 3 story, part 1 story, 110x150 ft., stucco, steel frame plant addn., concrete fdn., to W. H. Yates Constr. Co., Ltd., 400 Wellington St. N. Est. about $150,000. CD 5/12—ENR 9/19.

Ont., Niagara Falls — PLANT — Canadian Carborundum Co. Ltd., Stanley St., 1 story, 90 x 252 ft., brick, steel furnace building, to Robertson Constr. & Engr. Co., Ltd., Imperial Bank Chambers, about $200,000. CD 5/1—ENR 5/8.

Ont., St. Thomas — ROUNDHOUSE — Pere Marquette Ry. Co., General Motors Bldg., Detroit, Mich., H. A. Cassil, ch. engr., 10 stall roundhouse, turntable, office, building, coal dock and cinder pit, etc., to Johnson Brothers, Ltd., Aylmer. $350,000. Bids 6/12. CD 6/6—ENR 6/12.

Ont., Windsor—PLANT—Walker Metal Products, Ltd., 1511 Kildare Rd., 1 story, 100x135 ft., brick, steel plant addn., to Hein Constr. Co., Ltd., 172 Aylmer Ave. $42,000.

Que., Drummondville—PLANT—Flax Industries, Ltd., 710 Victoria Sq., Montreal, 1 story, rein.-con., steel plant, Dorion St., to Montplaiser & Archambault, Dorion St., Montreal. $75,000. T. Pringle & Son, Ltd., 485 McGill St., Montreal, engrs.

Que., Montreal—PLANT—Allied War Supplies Corp., 420 Lagauchetiere St. W., war industries plant near here, to Dufresne Constr. Co. Ltd. ,1832 Blvd. Pie IX. Est. about $200,000.

Que., Montreal — GARAGE — Canadian National R.R., 360 McGill St., remodeling garage, Montfort St., to Sutherland Constr. Co., Ltd., 1440 Ste. Catherine St. W. $80,000. J. Schofield, 355 McGill St., archt.

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

RATE: *THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION*
COPY RECEIVED *UP TO 12 NOON MONDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST-MINUTE ADS*
SEND COPY *TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.*

Bids: July 7 (367)

Water Supply Facilities

WATER MAINS, ELEVATED STEEL WATER TANK, WELLS AND CENTRIFUGAL PUMP
CITY OF FORT LAUDERDALE, FLORIDA

Sealed bids for furnishing and installing water main, for furnishing and installing one sub-aqueous main, for furnishing and erecting one 500,000 gallon elevated steel water tank, screens for seven wells and centrifugal pump for water works system of the City of Fort Lauderdale, Florida, will be received by the City Commission at the City Commission Room in the City Hall, Fort Lauderdale, Florida, until 10 o'clock A.M. Eastern Standard Time, on the seventh day of July, 1941, and then at said room publicly opened and read aloud.

The information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Performance Bond may be examined at the office of the City Clerk, City Hall, Fort Lauderdale, Florida, and at the office of Solomon & Keis, 257 Broadway, Troy, N. Y. Copies thereof may be obtained at the office of Solomon & Keis or from the City Clerk upon payment of $25.00 for each set. Any bidder upon returning such set promptly and in good condition will be refunded his payment, and any non-bidder upon so returning such set will be refunded $15.00.

The City Commission of the City of Fort Lauderdale, Florida, reserves the right to waive any informalities in or to reject any or all bids.

A certified check made payable to the order of the City of Fort Lauderdale, Florida in the amount of five percentum (5%) of the bid must be deposited by each bidder with his bid as a guarantee that in case the contract is awarded to him, that he will within five (5) days thereafter, execute such contract and furnish a satisfactory performance bond. On failure to do so, he shall forfeit the deposit as liquidated damages, and acceptance of the bid will be contingent upon the fulfillment of this requirement by the Bidder.

CITY OF FORT LAUDERDALE, FLORIDA
J. H. Philpott,
City Manager.

SOLOMON & KEIS,
Engineers
June 16, 1941

Bids: July 8 (305)

Bridge

DADE COUNTY

MIAMI, FLORIDA

Sealed bids for furnishing all material and labor and construction of a Bascule Bridge, which is a part of Biscayne Causeway, over the Biscayne Bay Channel, will be received by the Board of County Commissioners at the office of said Board in Miami, Florida, until 10 o'clock A.M. on the 8th day of July, 1941 at which time and place all bids received will be publicly opened and read aloud.

All bids must be submitted in sealed envelopes bearing on the outside the name of the bidder, his address and the name of the project for which the bid is submitted, and the date of opening.

Information for Bidders, Forms of Bid Proposal, Form of Contract, Plans, Specifications, and Form of Performance Bond may be examined at said office or at the office of the County Engineer, in Miami, Florida, and copies thereof obtained upon payment of $25.00 for each set, $15.00 of which payment will be refunded upon return of such set promptly, in good condition.

The Board of County Commissioners reserves the right to waive any informalities in, or to reject any or all bids.

Each bid must be accompanied by a certified check in the amount of five per cent (5%) of the base bid as guarantee that the bidder if awarded the contract, will within ten (10) consecutive calendar days after written notice being given of such award, enter into a written contract with the Board of County Commissioners of Dade County, Florida, in accordance with the accepted bid, and give a Performance Bond satisfactory to the Board of County Commissioners of Dade County, Florida, equal to one hundred per cent (100%) of the base contract price.

Attention of bidders is called to the requirements as to "Supplies and Personnel" to be observed and minimum wage rates to be paid under the contract.

No bidder may withdraw his bid within forty-five (45) days after the date set for the opening thereof.

Edmund Friedman, County Engineer
BOARD OF COUNTY COMMISSIONERS OF DADE COUNTY, FLORIDA
By E. B. Leatherman,
Clerk Circuit Court
By H. S. Sweeting,
Deputy Clerk

Bids: July 16 (373)

Driveways and Streets

Sealed proposals will be received by the State Highway Department at its office, Dover, Del., until 2:00 P. M., E. S. T. July 16, 1941 and at that time and place publicly opened for contracts involving the following approximate quantities:

CONTRACT 790

Driveways & Streets for Motor Vehicle Building, 8th & Bancroft Parkway, Wilmington, New Castle County

2000	Cu. Yds. Excavation
200	Cu. Yds. Borrow
530	Cu. Yds. Cement Concrete Base Course (Cr. Controlled)
400	Tons Bituminous Concrete Surface Course
180	Lin. Ft. 8" Vitrified Clay Sewer Pipe
700	Lin. Ft. Cement Concrete Curb
3150	Sq. Ft. Cement Concrete Sidewalk
4	Catch Basins
2	Manholes
3000	Lb. Castings
300	Lin. Ft. Wire Rope Guard Fence
2	End Post Attachments
400	Cu. Yds. Topsoil

Attention is called to the Special Provisions in the proposal, specifications of April 1, 1941 and contract agreement.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No. ....."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Complete sets of plans and specifications may be obtained after July 1, 1941 upon receipt of two dollars ($2.00) for each contract, which amount will not be refunded.

Make checks payable to the State Highway Department.

STATE HIGHWAY DEPARTMENT
By: F. V. duPont, Chairman.

W. W. Mack, Chief Engineer.
Dover, Delaware.
June 18, 1941.

Bids: July 10 (378)

Lightning Arresters and Circuit Breaker

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

SANTEE-COOPER PROJECT
DOCKET NO 4329-P-R

115 KV LIGHTNING ARRESTERS AND OIL CIRCUIT BREAKER

1. TIME AND PLACE OF OPENING BIDS: Sealed proposals for furnishing four sets of lightning arresters and one oil circuit breaker will be received by the South Carolina Public Service Authority at the office of the Engineer, Harza Engineering Company, 27 Cumberland Street, Charleston, S. C., until 10:00 a. m. July 10, 1941, at which time all proposals will be publicly opened and read.

2. PROCUREMENT OF PLANS AND SPECIFICATIONS: Proposals must be submitted on the forms furnished by the Authority. These forms, including the plans and specifications and other contract documents, may be obtained from the office of the Secretary of the Authority, Room 508, Peoples Office Building, Charleston, S. C., upon payment of $10.00 for the first set and $3.00 per set thereafter. No refund will be made. These documents may also be examined free of charge at the offices of the Authority, Columbia and Charleston, S. C.; at the offices of the Engineer, 27 Cumberland Street, Charleston, S. C., and 205 W. Wacker Drive, Chicago, Illinois; at the offices of the Associated General Contractors, Charlotte, N. C., Atlanta, Ga.; and at the plan room of the F. W. Dodge Company, Atlanta, Ga.

3. DESCRIPTION OF THE WORK: Separate and combined bids will be received on the work as follows:

Schedule 1—115 kv. Lightning Arresters: This schedule will consist of furnishing four sets of three phase, 115 kv. lightning arresters with braces for the Pinopolis Main Switchboard about 32 miles north of Charleston, S. C.

Schedule 2—115 kv. Oil Circuit Breaker: This schedule will consist of furnishing one 115 kv., 1,000,000 kva rupturing capacity, standard duty oil circuit breaker for the Charleston Substation near North Charleston, S. C.

4. BIDDER'S BOND: Each bid must be accompanied by a certified check or bidder's bond executed by the bidder and a surety company licensed to do business in South Carolina and Countersigned for the Surety by an agent or attorney-in-fact who is a bona fide resident of the State of South Carolina, in the sum of not less than five percent of the amount of the bid. This is required as a guarantee that if the bid is accepted, a contract will be immediately entered into and the performance of it properly secured. The certified check or bond will be returned upon non-acceptance of bid or execution of contract.

5. WITHDRAWAL AND REJECTION OF BIDS: No bid may be withdrawn for a period of thirty days after the date set for the opening of said bid. The Authority reserves the right to reject any or all bids and to waive informalities therein.

6. LICENSES: Bidders not fabricating any shop work in South Carolina are not required to secure General Contractor's Licenses.

The General Counsel of the South Carolina Tax Commission has ruled that manufacture outside the State and shipping equipment to the site of the project is not subject to Bidders' or Contractors' License Taxes under Section 2543 of the Civil Code of 1932.

Any Bidder not exempted under the above paragraphs will be required to show issuance of such licenses before his bid is opened or considered.

By order of the Board of Directors.

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY
By Tom B. Pearce,
Chairman

ATTEST:
Charles H. Gerald,
Secretary

U. S. GOVERNMENT

FEDERAL WORKS AGENCY, Public Roads Administration, Washington, D. C., June 5, 1941. SEALED BIDS will be received at the office of the District Engineer, Public Roads Administration, Room 123, Winder Building, 17th and F Streets, N. W., Washington, D. C., until 11 o'clock a.m., E.S.T., July 10, 1941, for *grading, draining, the construction of crusher run base course with a surface application of calcium chloride, the construction of tunnels, and other work*, Project 2Z1, Blue Ridge Parkway, Swain and Jackson Counties, North Carolina. Length: 2.9 miles. The approximate quantities of the more important items are as follows: 32 acres clearing; 326,600 cu. yd. excavation; 16,150 tons crushed stone; 11,350 cu. yd. tunnel excavation; 411 lin. ft. concrete tunnel lining; 97,800 lbs. reinforcing steel; 325 cu. yd. cement concrete tunnel lining. Minimum rates of wages for laborers and mechanics on this project have been fixed by the Secretary of Labor as required by law. Where plans and specifications are requested, a deposit of $10.00 in cash, or preferably a certified check for $10.00 which must be made payable to the Treasurer of the United States, will be required to insure their return within 15 days after the opening of bids. Plans, specifications and proposal forms may be obtained at the office of the District Engineer, Public Roads Administration, Room 123, Winder Building, 17th and F Streets, N. W., Washington, D. C. Bid forms may be obtained and plans and specifications seen at the office of the Public Roads Administration, Gatlinburg, Tennessee. H. J. Spelman, District Engineer. (302)

ON OR ABOUT July 1, 1941, the Washington Office of the Panama Canal will issue invitations for bids for processing approximately 12,000,000 tons of concrete aggregate for Third Locks Project, The Panama Canal. The period of advertisement will be approximately 60 days. The successful bidder will be required to commence work within 30 calendar days and to complete the work about January 1, 1945. The work to be performed consists of furnishing all plant and labor and doing all work required for the *processing of the concrete aggregate for the Third Locks Project*, complete in accordance with the specifications and drawings, together with such incidental work at the sites and vicinity thereof as may be required for completion of the work within the intent and scope of the specifications. Award will be made as a whole to the lowest responsible bidder. Specifications, plans and bidding forms will be mailed on the date of issue to prospective bidders from whom properly executed application forms, copies of which are obtainable from the General Purchasing Officer, The Panama Canal, Washington, D. C., are received in advance. (336)

OFFICE OF CONSTRUCTING QUARTERMASTER, P. C. Dept., Quarry Heights, C. Z. Sealed bids in triplicate, subject to the conditions contained herein will be received until 2 P. M. Eastern Standard Time, July 11, 1941, and publicly opened for furnishing materials and equipment and performing all labor necessary for *construction and completion of Armament and Instrument Inspection and Adjustment Building at Howard Field and Albrook Field, C. Z.* Bids will be opened at the Office of Constructing Quartermaster, Panama Canal Department, Albrook Field, Canal Zone. Plans and specifications are available from the above office and Constructing Quartermasters, Fort Mason, California and 120 Wall Street, New York, N. Y., upon deposit of Twenty-Five Dollars ($25.00) certified check made payable to the Treasurer of the United States. (366)

U. S. ENGINEER OFFICE, P. O. Box 59, Louisville, Ky. Sealed bids will be received here until 10:00 a.m., C.S.T. (11:00 a.m., Central Daylight Saving Time), July 24, 1941, and then opened for *construction of Flood Protection Works, East Section, Unit I, Jeffersonville, Clark County, Indiana.* $10 deposit required for plans, which may be seen at U. S. Engineer Offices: 621 Kentucky Ave., Jeffersonville, Indiana, and 615 Federal Building, Louisville, Ky. Further information on application. (382)

U. S. ENGINEER OFFICE, Nashville, Tenn.—Date for opening bids for *construction of Dam and Appurtenant Works, Wolf Creek, near Jamestown, Ky.*, has been extended to July 8, 1941. Further information on application. (379)

WAR DEPARTMENT, Office of the Constructing Quartermaster, Pine Camp, New York. Sealed bids in triplicate will be received until 1 P. M. eastern standard time, June 27, 1941 and then publicly opened, for furnishing all labor, equipment, and materials and performing all work for *constructing and completing six (6) Day Rooms, one (1) Officers' Mess, one (1) Recreation Bldg., & one (1) Garage, with utilities and appurtenances thereto, at Pine Camp, New York*; in strict accordance with specifications, schedules and drawings. Further information on application. (360)

U. S. ENGINEER OFFICE, Buffalo, N. Y.—Sealed bids will be received here until 1:00 P. M., Eastern Standard Time, July 1, 1941, and then opened, for *construction of storehouse-garage, bituminous driveways, stone filled parking areas, and land grading*, on Government reservation located at Foot of Bridge St., Buffalo, N. Y. Specifications will be furnished without cost. Deposit of $10.00 required for plans. Further information on application. (212)

U. S. ENGINEER OFFICE, 1st and Douglas Sts., N. W., Washington, D. C. Sealed proposals will be received here until 3 p.m., July 2, 1941, and then opened, for furnishing all plant, labor, material and incidentals for the *construction of a water intake chamber and appurtenances thereto* for the conversion of the Dalecarlia Hydroelectric Station into an emergency pumping station, Dalecarlia Reservation, Washington, D. C. Further information on application. (296)

UNITED STATES ENGINEER OFFICE, NEW YORK DISTRICT, NEW YORK, N. Y., Room 420, Whitehall Building, 17 Battery Place, New York, N. Y. Sealed bids will be received until 12:00 Noon, D.S.T. July 18, 1941, and then publicly opened, for furnishing all labor and materials and performing all work for *dredging and satisfactorily disposing of approximately 366,000 cubic yards, place measurement, of all material except ledge rock from the South River, New Jersey.* (374)

WAR DEPARTMENT, U. S. Engineer Office, 332 Post Office Building, Baltimore, Maryland. Sealed bids, in duplicate, will be received here until 11:00 A.M., E.S.T., July 14, 1941, and then publicly opened for furnishing all plant, labor and materials and performing all work required for *dredging approximately 685,000 cubic yards material, place measurement, from Middle River and Dark Head Creek, Md.* Plans and specifications available upon receipt of certified check in amount of $2.00 made payable to the "Treasurer of the United States". Further information upon application. (381)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 13, 1941. Sealed bids (Specifications No. 960) will be received at the office of the U. S. Bureau of Reclamation, Old Post Office Building, Sacramento, California, until 10 a.m., July 14, 1941, and will at that hour be publicly opened for furnishing labor and materials and performing all work for the *construction of the Keswick Dam*, Kennett division, Central Valley project, California. The work is located near Redding, California. The principal items of work and the estimated quantities involved are as follows: 396,000 cubic yards of excavation for dam; 260 cubic yards of excavation in shafts for fault and seam cut-offs; 40,000 cubic yards of excavation for road; 451,000 cubic yards of excavation for railroad relocation; 250 cubic yards of excavation for road structures; 5,700 cubic yards of backfill; 2,500 cubic yards of riprap; 3,900 cubic yards of crusher-run base for road surfacing; 126 M gallons of watering for road surfacing; 3,800 gallons of applying liquid asphalt for prime coat; 1,300 cubic yards of mineral aggregate for road-mix oil surfacing; 31,000 gallons of applying liquid asphalt for road-mix oil surfacing; 110 cubic yards of screenings for seal coat; 3,100 gallons of applying liquid asphaltic emulsion for seal coat; 100 cubic yards of rubble-masonry walls; 5,000 cubic feet of pressure grouting; 4,000 cubic feet of pressure grouting with packers; 93,355 cubic yards of concrete; 600 cubic yards of lean concrete for protection of reinforcement bars; placing 3,600,000 pounds of reinforcement bars; cooling 45,000 cubic yards of concrete; drilling 23,000 linear feet of line holes for trench excavation; drilling 240 linear feet of core-drill holes 5½ inches in diameter; drilling 4,300 linear feet of grout holes 1⅜ inches in diameter; drilling 240 holes for setting foundation-drainage and future-grouting pipes; drilling 3,100 linear feet of holes for anchor bars and grouting bars in place; placing 37,000 pounds of standard pipe and fittings for foundation grouting and drainage; placing 8,000 pounds of metal tubing and fittings for grouting contraction joints and fault and seam cut-offs; constructing 50 anchorages for grout outlets in rock; laying 300 linear feet of 24- to 48-inch diameter corrugated-metal pipe; constructing 2,050 linear feet of 6- to 24-inch diameter split-sewer-pipe drains; laying 140 linear feet of 6-inch diameter sewer pipe; constructing 800 linear feet of 8-inch diameter sewer-pipe drains embedded in gravel; placing 43,000 pounds of metal tubing and fittings for concrete-cooling systems; placing 5,500 linear feet of metal sealing strips without protection strips; placing 3,300 linear feet of metal sealing strips with protection strips; constructing 1,220 linear feet of asphalt seals; placing 60 linear feet of tubular-rubber seals; placing 3,700 square feet of elastic joint filler; fabricating and installing 15 M ft. b. m. of timber appurtenances; placing 79,000 pounds of stop-log and bulkhead-gate guides; installing 40,000 pounds of cranes, hoists, and fish sweep; laying 1,600 pounds of track rails; installing 61,000 pounds of gates and gate hoists; installing 51,000 pounds of stairway, ladders, frames, and guides; placing 4,000 pounds of metal floor plates, gratings, and trashracks; constructing 5,000 pounds of pipe handrails; installing 3,500 pounds of standard pipe, fittings, and valves less than 6 inches in diameter; installing 60,000 pounds of standard pipe, fittings, and valves 6 inches and larger in diameter; placing 13,000 pounds of 5-foot diameter steel pipe and fish tank; placing 1,700 pounds of anchor bolts for spillway gates; placing 1,400 linear feet of electrical metal conduit; installing 100 pounds of electrical conductors; and installing 5,500 pounds of ground wires and ground rods. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. Any unbalanced bid which, in the opinion of the contracting officer, jeopardizes the interest of the Government will be subject to rejection for that reason. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of 40 percent of the total amount payable by the terms of the contract. Partial payments will be made monthly. The work shall be commenced within thirty (30) calendar days after date of receipt of notice to proceed and shall be completed within five hundred (500) calendar days from the date of receipt of such notice. Liquidated damages for delay will be two hundred and fifty dollars ($250) per day. No charge to prospective bidders for copies of the specifications and drawings; to others $4.00 not returnable. Copies of the standard forms and of the specifications may be obtained from the office of the Bureau of Reclamation at Sacramento, California; Denver, Colorado; or Washington, D. C. H. W. Bashore, Acting Commissioner. (376)

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(For additional U. S. Government advertisements see page 32)

Bids: July 11 (384)

Underpass

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

P-R-S-L UNDERPASS, EAST RED BANK AVENUE, WOODBURY

Reconstruction of present Underpass at Pennsylvania-Reading Seashore Lines, East Red Bank Avenue, Woodbury, Gloucester County, Fed. Aid Project FAGM-32 (1) Off. The project consists of the removal of the superstructure of the existing bridge, the reconstruction of the substructure, and the construction of a new superstructure, the construction of roadway approaches and incidental work. The new bridge will be of steel and concrete and will provide for two tracks and be about 74′ in length. The principal items of construction are:

Bridge Items

Estimated:
662 cu. yds. concrete in structures.
26,410 lbs. reinforcement steel in structures.
326,032 lbs. structural steel.
1,964 sq. ft. waterproofing.
1,150 lin. ft. timber piles.
17.0M ft. B.M. timber.

Roadway Items

1,200 cu. yds. roadway excavation unclassified.
859 sq. yds. rein. concrete pavement 9″ thick.
876 sq. yds. surface treated gravel pavement 8″ thick.
4,100 cu. yds. borrow excavation.

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, New Jersey, on Friday, July 11, 1941, at eleven o'clock, 11:00 A. M., EASTERN STANDARD TIME, twelve o'clock Noon, DAYLIGHT SAVING TIME, and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed work is a "Federal Aid Grade Crossing Project" under the provisions of Section 3 of the Federal Act approved June 8, 1938, Public No. 584—75th Congress, and is to be performed in accordance with the Special Provisions and Requirements of the Federal Works Agency, Public Roads Administration, as outlined in the Specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, 29 Cooper Street, Woodbury, New Jersey. The attention of bidders is directed to the Special Provisions covering subletting or assigning the contract and to the use of Domestic Materials. The minimum wage paid to all unskilled labor employed on this contract shall be 50¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.20 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made on the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: E. Donald Sterner,
State Highway Commissioner.

Bids: July 11 (386)

Road

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON
READVERTISEMENT

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

BRUNSWICK PIKE ROAD, SECTION 1

Construction of Brunswick Pike Road, Section 1, from the Mercer County Line toward Lambertville, Hunterdon County, length 2.84 miles, Federal Aid Secondary Project FAS 43-A (1).
Estimated:
22,521 cu. yds. roadway excavation unclassified.
30,521 sq. yds. bituminous concrete pavement on penetration macadam foundation.

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Friday, July 11, 1941, at eleven o'clock, 11:00 A. M., EASTERN STANDARD TIME, twelve o'clock Noon, DAYLIGHT SAVING TIME, and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Secondary Project" under the provisions of Section 2 of the Federal Act approved June 8, 1938, Public No. 584—75th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, 90 Main St., Flemington, New Jersey. The attention of bidders is directed to the Special Provisions covering subletting or assigning the contract and to the use of Domestic Materials. The minimum wage paid to all unskilled labor employed on this contract shall be 50¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.20 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500, nor more than $20,000.00, and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: E. Donald Sterner,
State Highway Commissioner.

Bids: July 11 (385)

Grade Crossing Elimination

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

GRADE CROSSING ELIMINATION, RIVERVIEW DRIVE, TOTOWA

Elimination of Riverview Drive Grade Crossing at D. L. & W. R. R., in the Boro of Totowa, Passaic County, Fed. Aid Project FAGM-31 (1). The project consists of the construction of a steel and concrete highway bridge 378′ long and 44′ wide over the tracks of the railroad, the construction of roadway approaches and incidental work. The principal items of construction are:

Bridge Items

Estimated:
7,950 lin. ft. treated timber piles.
1,961 cu. yds. concrete in structures.
641,219 lbs. structural steel.
197,300 lbs. reinforcement steel in structures.
4,790 sq. ft. waterproofing.

Roadway Items

68,000 cu. yds. borrow excavation.
4,081 sq. yds. 6″ bituminous penetration macadam foundation.
4,081 sq. yds. 2″ bituminous concrete pavement, type A or T.
936 sq. yds. 6″ bituminous penetration macadam pavement.

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, New Jersey, on Friday, July 11, 1941, at eleven o'clock, 11:00 A. M., EASTERN STANDARD TIME, twelve o'clock Noon, DAYLIGHT SAVING TIME, and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed work is a "Federal Aid Grade Crossing Project" under the provisions of Section 3 of the Federal Act approved June 8, 1938, Public No. 584—75th Congress, and is to be performed in accordance with the Special Provisions and Requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, 219-229 Ellison Street, Paterson, N. J. The attention of bidders is directed to the Special Provisions covering subletting or assigning the contract and to the use of Domestic Materials. The minimum wage paid to all unskilled labor employed on this contract shall be 50¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.20 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made on the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: E. Donald Sterner,
State Highway Commissioner.

OFFICIAL PROPOSALS

Bids: July 16 (387)

State Highway Work

STATE DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
ALBANY, N. Y.

Sealed proposals will be received by the undersigned at the State Office Building, 13th Floor, Albany, N. Y., until one o'clock p. m., advanced standard time, which is twelve o'clock noon, eastern standard time, on WEDNESDAY, JULY 16, 1941, for the following highway and bridge projects:

RECONSTRUCTION

County	Deposit for plans	Bid deposit	Type	Miles
Chautauqua	$5	$3,500	42.5' to 80' MMO. 40.5' to 42.5' Concrete 9"	0.71
Delaware	5	13,500	Concrete	2.97
Erie—Niagara	5	3,000	Painting Bridges	....
Essex	5	3,000	32' I-Beam; Concrete Approach	0.42
Jefferson	5	7,000	Concrete	2.13

CONSTRUCTION & RECONSTRUCTION

Oneida	10	21,500	46' Div. Lane Concrete Misc. Work	2.67
Oswego	10	32,000	Concrete	7.03

Maps, plans, specifications, and estimates may be obtained at the office of the Division of Highways, Albany, N. Y., and at the office of the District Engineers in whose districts the roads are located. The names and addresses of the District Engineers and counties in their districts will be furnished upon request, and may be seen at the office of the State Department of Public Works, State Office Building, Worth and Center Streets, New York City.

The deposit for Plans and Proposal Forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for return of one set, in good condition, within 30 days of award, or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds.

Proposal for each contract must be submitted in a separate sealed enveloped with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Division of the Treasury," for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

Minimum Wage Rate per hour for above work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor
Chautauqua	.75	.65	.65
Delaware	.75	.55	.45
Erie	.75	.75	.75
Essex	.75	.55	.50
Jefferson	.75	.55	.55
Niagara	.75	.75	.75
Oneida	.75	.60	.60
Oswego	.75	.60	.60

UNLESS SHOWN OTHERWISE IN THE ITEMIZED PROPOSAL FOR EACH PROJECT.

The right is reserved to reject any or all bids.

A. W. BRANDT,
Supt. of Public Works.

EMPLOYMENT

POSITIONS VACANT

STRUCTURAL DETAILERS also recent Graduate C.E. Write in detail education, experience references and salary expected. Saul Shaw & Co., 24 Walnut St., Newark, N. J.

DRAFTSMEN: Electrical, mechanical, structural and reinforced concrete designers. Experience on power plant design preferable. Location New York City. State experience and salary desired. P-94, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

STRUCTURAL DETAILERS AND CHECKERS, permanent work if satisfactory. Roanoke Iron & Bridge Works, Inc., Roanoke, Virginia.

WANTED by large Engineering and Contracting corporation Structural Engineering graduates with three to five years designing and drafting experience. Location Pittsburgh district. Salary $200 to $250. P 107, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

ESTIMATOR: Industrial Building Work. State age, experience, salary expected. Send photograph. Location Philadelphia. P 109, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

WANTED, experienced engineer who is completely familiar with estimating, pricing, expediting, and purchasing by General Contractor who specializes in public building work and commercial construction. Permanent job. Only well qualified and experienced men need apply. State age, experience, former connections, and salary expected. P 118, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

WANTED Civil Engineering Graduates for Drafting Department of Structural Steel and Tank Fabricator. P-121, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

QUARRY SUPERINTENDENT, wanted best qualified man to take full responsibility for operation and production of Limestone Quarry with 800 ton per hour capacity. Real opportunity for right man. Give age, qualifications and last salary. P-122, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

ENGINEERS WANTED by Tennessee Valley Authority in connection with the emergency construction activities authorized as a part of the National Defense Program, the Tennessee Valley Authority has immediate openings in the following fields: Electrical engineering design, Structural engineering design, Mechanical engineering design, Chemical engineering design, Construction, Inspection, Surveying. The immediate need is for personnel for work on recently authorized emergency projects identified with the National Defense Program. However, this work provides an opportunity for development and promotion in connection with the regular long-range program of the Authority. Interested persons who already have applications on file with the Authority are requested to bring their records up to date by providing supplementary information concerning recent experience and current interests. Candidates who have not previously made application for employment with the Authority are requested to forward complete information regarding their qualifications, including citizenship, age, formal education, and employment record (including dates, employers, salaries, and descriptions of duties). The Tennessee Valley Authority Act exempted the Authority from civil service regulations, but provided at the same time that all appointments should be made on a basis of merit and efficiency. Address all communications to Employment Division, Tennessee Valley Authority, Knoxville, Tennessee.

EMPLOYMENT SERVICE

ENGINEERING EXECUTIVES — Purchasing Directors, Manufacturing Controllers, Cost, Industrial, Lubrication, Sales Engineers. Permanent. Confidential. Write Derry Plan, 872 Hanna Building, Cleveland, Ohio.

EMPLOYMENT AGENCY

DESIGNERS-DRAFTSMEN WANTED. Experienced. Also Recent Graduate Mechanical Structural and Industrial Engineers. Cleveland Engineering Agency, 2132 East Ninth, Cleveland, Ohio.

POSITIONS WANTED

LATIN AMERICA, Construction Manager: 19 years successful background, housing and industrial buildings, roads, drainage, sewage systems, tanks, bridges, heavy grading, transmission lines, pipe lines, airports, oil fields, surveying and designing. Fluent Spanish, skilled in training and organizing, directing Latins. Desire position as engineering or construction supervisor. American, married, registered Professional Engineer. Prefer long time foreign engagement but will consider other offers. PW-50, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CIVIL ENGINEER: Graduate, 20 years experience, industrial and public bldgs., design, estimating, purchasing, inspection, supervision and general management. PW-85, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

SUPERINTENDENT 28 years experience, Bridges, Piers, Shipways, Reservoirs, Sewerage Disposal-Plants, Excavating Work, and all heavy construction. PW-84, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

NIGHT SUPERINTENDENT on heavy foundation job wants to make change on account of poor working and living conditions. Prefer eastern U. S. but go anywhere with good outfit. Age 30. Experienced on excavating, heavy concrete work, dams and road construction. PW 111, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

POSITIONS WANTED

CONSTRUCTION FOREMAN: Mech. Dept. 45 American 18 years experience plumber, pipefitter, steam-fitter, 10 years General Construction Foreman Building Oil Refineries Pipe Lines, Pump Stations, etc. in Latin America. Fluent Spanish, available immediately. Go anywhere. F. Lambert, 403 Nashville Ave., New Orleans, La.

TECHNICAL EXECUTIVE: University Graduate, Professional License; 18 years field and office experience; economic studies, design, construction; railways, highways, hydro, utility structures, maintenance and repairs. Presently employed, excellent health, seeks permanent position or association with consulting office. Northeastern states preferred. Salary $6,000. PW 108, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

GENERAL CONSTRUCTION and Carpenter Foreman 45—20 years experience in heavy construction excavation — Foundations — reinforced concrete sewer waste disposal plants—bridges— industrial and commercial buildings defense housing project—superintendent for more than 8 years. Go anywhere. Available July 3, 1941. PW 110, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

MANAGER OR GENERAL SUPERINTENDENT, twenty-eight years experience, Industrial Plants and Commercial Buildings. Training includes Architecture, Civil Engineering and Business Management. Industrial plants preferable. Best references, location immaterial, available immediately. PW 113, Engineering News-Record, 330 W 42nd St., New York, N. Y.

ENGINEER—graduate, 24 years experience on building construction. Now employed on large defense project nearing completion. Available on short notice. PW 112, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CONTRACTORS ENGINEER—Superintendent or assistant. Twenty with good firms as engineer foreman and superintendent. Steel and wood form and plant design, layout, methods on dams, bridges and some industrial construction. Can handle men and equipment economically. Hard worker. Ready now. PW 114, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

ENGINEER-CONSTRUCTION Civil Superintendent-General Foreman. Experience on heavy foundations, steel erection, industrial buildings, oil refinery and power plant construction. Dam, Railroad, highway and bridge, heavy excavation-wet dry and rock. Thorough knowledge of construction machinery and application of same to the work. Can organize a project and keep it organized. Past fifteen years in Central and South America and West Indies. Will be in New York for month of July. Address all replies to PW 119, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

(Continued on page 32)

U. S. GOVERNMENT

(Continued from page 29)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 14, 1941. Sealed bids (Specifications No. 968) will be received at the office of the U. S. Bureau of Reclamation, Old Post Office Building, Sacramento, California, until 10 a.m., July 14, 1941, and will at that hour be publicly opened for furnishing labor and materials and performing all work for the *construction of combination stations, four-room dwellings, four-family section houses, tool houses and woodsheds*, Southern Pacific Railroad relocation, Kennett division, Central Valley project, California. The work is located between Redding and Delta, California. The work involves the construction of one four-room dwelling, one single woodshed, and fences at siding No. 1; one combination station, two four-room dwellings, two four-family section houses, two double woodsheds, one section tool house, and fences at siding No. 2; two four-room dwellings, two four-family section houses, one section tool house, one signal-maintainer's tool house, two double woodsheds, and fences at siding No. 4; one combination station, five four-room dwellings, two four-family section houses, three double woodsheds, one single woodshed, one section tool house, and fences at siding No. 6. The buildings will be of wood-frame construction on concrete foundations. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Partial payments will be made monthly. The work shall be commenced within thirty (30) calendar days after date of receipt by the contractor of notice to proceed and shall be completed within one hundred and eighty (180) calendar days from the date of receipt of such notice. Liquidated damages for delay will be twenty-five dollars ($25) per day. No charge to prospective bidders for copies of the specifications and drawings; to others $2.50 per copy, not returnable. For particulars, address the Bureau of Reclamation at Sacramento, California; Denver, Colorado; or Washington, D. C. H. W. Bashore, Acting Commissioner. (380)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 16, 1941. Sealed bids (Specifications No. 970) will be received at the office of the U. S. Bureau of Reclamation, Old Post Office Building, Sacramento, California, until 10 a.m., July 14, 1941, and will at that hour be publicly opened for furnishing labor and materials and performing all work for the construction of *earthwork and structures.* Battle Creek road, migratory fish control, Kennett division, Central Valley project, California. The work is located near Redding, California. The principal items of work and the estimated quantities involved are as follows: 80,000 cubic yards of excavation, common, for roadway; 35,000 cubic yards of excavation, rock, for roadway; 57,000 station cubic yards of overhaul; 450 cubic yards of excavation, common, for structures; 200 cubic yards of excavation, rock, for structures; 75 cubic yards of concrete; 600 cubic yards of backfill; 275 square yards of dry-rock paving; placing 7,500 pounds of reinforcement bars; laying 2,260 linear feet of 18- to 60-inch diameter corrugated-metal pipe; erecting 40 M ft. b.m. of timber in bridges; placing 1,400 square feet of asphalt plank on bridge floors; and constructing 15 cattle guards. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Partial payments will be made monthly. The work shall be commenced within thirty (30) calendar days after date of receipt by the contractor of notice to proceed and shall be completed within one hundred and seventy (170) calendar days from the date of receipt of such notice. Liquidated damages for delay will be fifty dollars ($50) per day. No charge to prospective bidders for copies of the specifications and drawings; to others $2.00 per copy not returnable. Copies of the standard forms and of the specifications may be obtained from the office of the Bureau of Reclamation at Sacramento, California; Denver, Colorado, or Washington, D. C. H. W. Bashore, Acting Commissioner. (377)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 13, 1941. Sealed bids (Specifications No. 969) will be received at the office of the U. S. Bureau of Reclamation, Old Post Office Building, Sacramento, California, until 10 a.m., July 11, 1941, and will at that hour be publicly opened for furnishing labor and materials and performing all work for the *construction of protection walls and paving* for Sacramento River Bridge, first crossing, Southern Pacific Railroad relocation, Kennett division, Central Valley project, California. The work is located near Redding, California. The principal items of work and the estimated quantities involved are as follows: 2,310 cubic yards of concrete in walls (includes excavation); 1,460 cubic yards of concrete in paving; and placing 350,000 pounds of reinforcement bars. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be part of the contract. Guarantee will be required with each bid in amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Partial payments will be made monthly. The work shall be commenced within thirty (30) calendar days after date of receipt by the contractor of notice to proceed and shall be completed within two hundred (200) calendar days from the date of receipt of such notice. Liquidated damages for delay will be ten dollars ($10) per day. No charge to prospective bidders for copies of the specifications and drawings; to others $1.50 per copy, not returnable. For particulars, address the Bureau of Reclamation, Sacramento, California; Denver, Colorado; or Washington, D. C. H. W. Bashore, Acting Commissioner. (375)

WAR DEPARTMENT, Office of the Construction Quartermaster, Fort Dix, New Jersey. Sealed proposals will be received in this office on the following proposals for construction at Fort Dix, New Jersey: UNTIL 8:00 A.M., E.S.T., June 27, 1941, and then publicly opened for *construction and completion of Temporary Housing*, addition to the Cantonment Hospital, consisting of One Barrack, Type HB-54, One Barrack, Type HB-16, One 4-Car Amoulance Garage, One Patients Recreation Building, Type HR-3 and one Administration Building, Type A-6, including Utilities thereto. UNTIL 8:30 A.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Miscellaneous Buildings consisting of, One Ordnance Shop & Boiler House and Three Ordnance Warehouses, including Utilities thereto. UNTIL 9:00 A.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of additional temporary housing at Reception Center, consisting of, Twenty-Five Barracks, Type Standard, One Induction Building, One Post Exchange, Type E-2, One Recreation Building, Type RB-1, One Warehouse, Type SH-18, Two Wards, Type W-2, One 1000-Men Mess Cafeteria, One Officers Quarters, Type OQM-29, including Utilities thereto. UNTIL 9:30 A.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Twelve Gasoline Dispensing Stations and One Bulk Storage Building, including the Utilities thereto. UNTIL 10:30 A.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of One Field House and including Utilities thereto. UNTIL 11:00 A.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Temporary Housing consisting of, Twelve Barracks, Type Standard, Four 170-Men Mess Halls, Type Standard, Four Recreational Buildings, Type RB-2, Four Company Storehouses and Administration Buildings, Type SA-2, including Utilities thereto. UNTIL 12:00 N., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Temporary Housing, Addition to Tilton General Hospital, consisting of One Hospital Barrack, Type HB-16, One 4-Car Ambulance Garage, One Patients Recreation Building, Type HR-3, One Administration Building, Type A-6, and One Telephone & Telegraph Building, Type TT-1, including Utilities thereto. UNTIL 12:30 P.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Miscellaneous Buildings consisting of Six Motor Repair Shops, Type SP-14, Four Motor Repair Shops, Type SP-2, Two Grease Racks, Type RG-1, Two Grease Racks, Type RG-2, Four Oil Houses, Four Wash Racks, including Utilities thereto. UNTIL 1:30 P.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Temporary Housing, consisting of One Service Club, Type SC-4, Two Theatres, Type TH-4, One Guest House, Type OQ-7, One Recreational Building, Type OM-1, One Theatre, Type TH-3, One Officers Quarters, Type OQM-18, Two Company Storehouses and Administration Buildings, Type SA-2, including Utilities thereto. UNTIL 2:30 P.M., E.S.T., June 27, 1941, and then publicly opened for construction of Miscellaneous Buildings consisting of, One Post Headquarters Building, Type A-10, One Post Ordnance Building, Type A-10, One Post Finance Building, One Post Quartermaster Building, Type A-22, including Utilities thereto. UNTIL 3:00 P.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of Gasoline Storage for Airfield at Fort Dix, New Jersey. UNTIL 3:30 P.M., E.S.T., June 27, 1941, and then publicly opened for construction and completion of One PX Office Building and Warehouse, Type SH-18, including the Utilities thereto. Certified checks in the amount of Twenty-Five ($25.00) Dollars payable to The Treasurer of The United States required for deposits on Plans and Specifications. Further information upon application to this office. (383)

WAR DEPARTMENT, Office of the Constructing Quartermaster, Fort Dix, N. J. Sealed Proposals will be received until 2:00 P.M., E.S.T., June 27, 1941 and then publicly opened for the *Construction and Completion of Nine (9) Officers Recreation Buildings, Type RB-3 and One (1) Officers Mess, Type OM-2 and utilities thereto, at Fort Dix, New Jersey.* Certified check in the amount of Twenty-Five ($25.00) Dollars payable to the Treasurer of The United States is required for deposit on Plans and Specifications. Further information upon application to this office. (388)

POSITIONS WANTED

(Continued from page 31)

WATER WORKS EXECUTIVE ENGINEER thoroughly familiar with water works engineering, construction, maintenance, operation, transmission and distribution system design, flow studies, waste surveys, pump specifications, installations and tests, meter maintenance program design, office routine, public relations and all matters incident to the operation of a water supply including the preservation of amicable relations with and within the personnel, desires position of Manager, Superintendent or Engineer of water supply of city or one or more industrial plants. PW 115, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

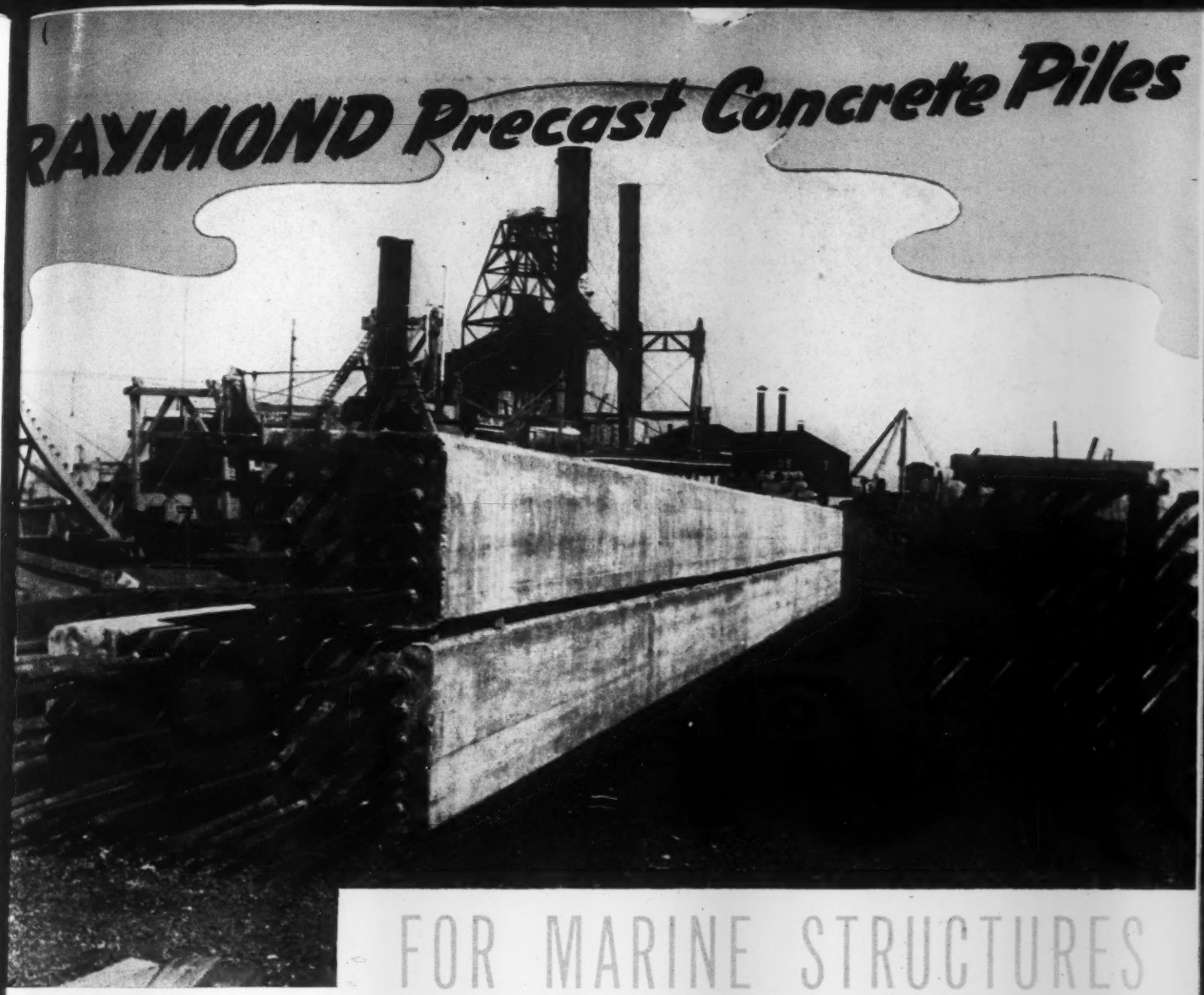
CONSTRUCTION SUPERINTENDENT, 42, desires change and would like contact good sized Contractor midwest, east and southern states. Thoroughly experienced on large scope work. Bridge and wet heavy construction. Good organization available. Address PW 116, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CONSTRUCTION SUPERINTENDENT, 35 years experience in the following lines of construction Factory Building Grade eliminations, Bridges Pile Driving Coffer Dams Sewer Tunnel Lining Roads Streets and in fact I am familiar with all lines of construction. PW 117, Engineering News-Record, 520 N. Michigan Ave., Chicago, Ill.

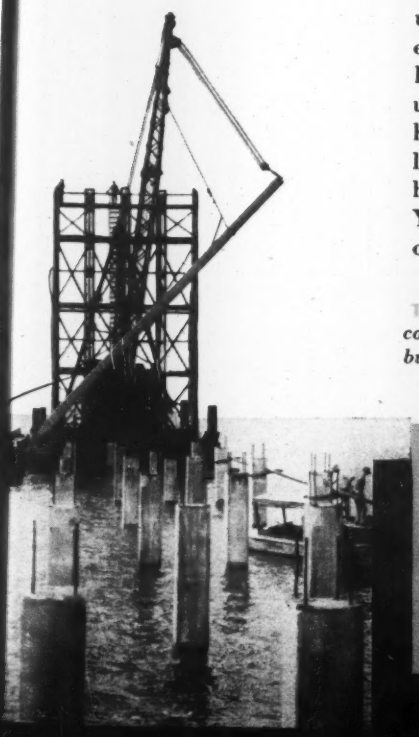
CIVIL ENGINEER—Graduate, 10 years experience, estimates, general construction, harbors, piers, docks, dredging. PW-120, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

CRANE OPERATOR 11 years, gas or diesel, plant or river. PW-123, Engineering News-Record, 330 W. 42nd St., New York, N. Y.

RAYMOND Precast Concrete Piles



FOR MARINE STRUCTURES



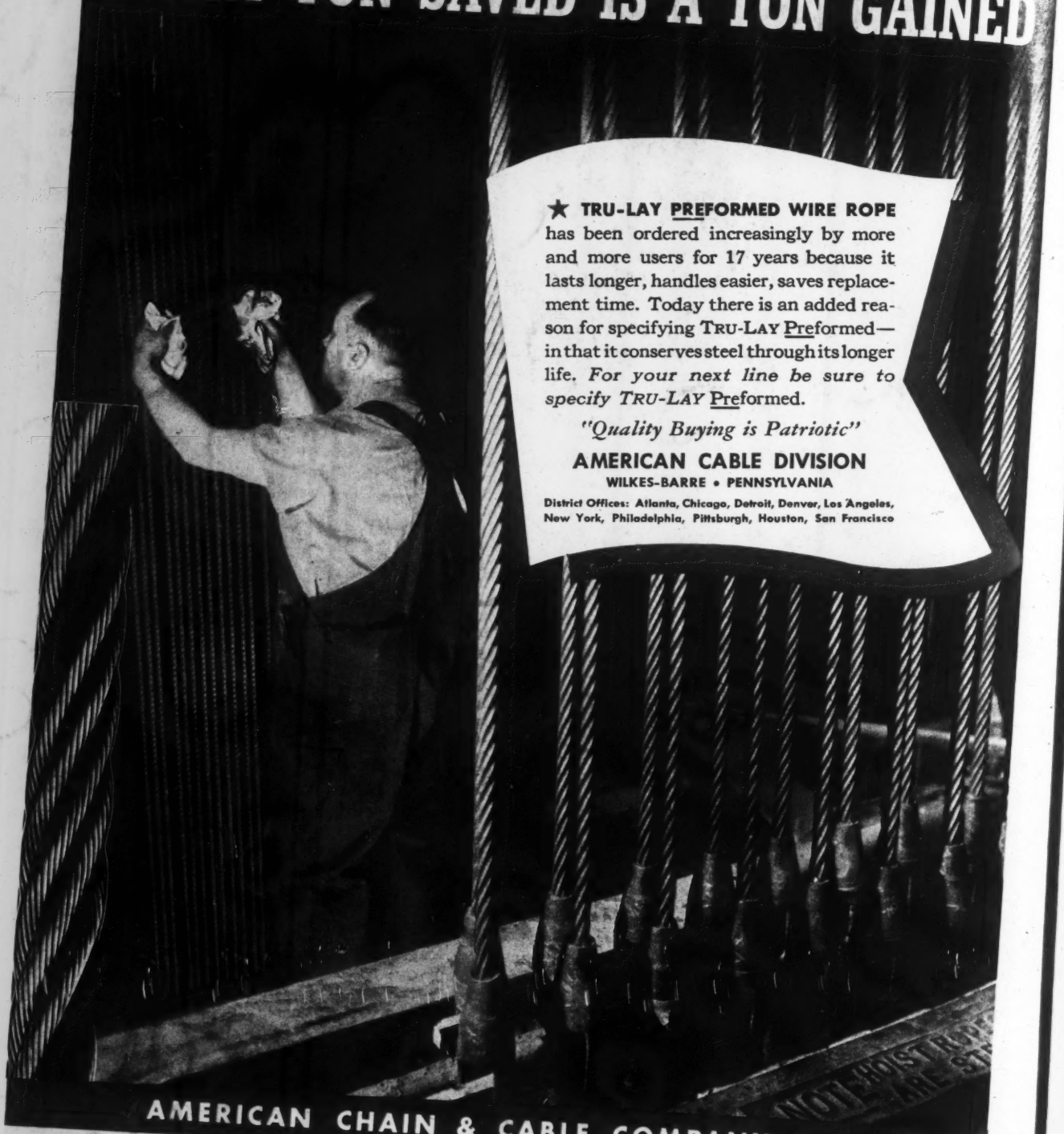
Raymond Precast Concrete Piles are widely used in the construction of docks, bulkheads and other marine structures. In this class of work Precast Piles have a large and useful field. ● Their use to the best advantage, however, requires a great deal of experienced judgment, not only in the matter of design and selection of materials, but in the provision of proper equipment, since in many cases, unusually long and unusually heavy piles are necessary. ● In one structure, the Raymond Company cast, handled, transported and placed such piles with a cross section of 24″ x 24″ up to a length of 115 feet, weighing 35 tons each. The equipment was such that four piles could be and were in the driver leads at the same time and two piles driven simultaneously. Your inquiries will receive prompt attention, whether in regard to Precast Piles or other Raymond services. 44 YEARS OF SUCCESSFUL EXPERIENCE.

THE SCOPE OF RAYMOND'S ACTIVITIES *includes every recognized type of pile foundation, concrete, composite, precast, steel, pipe and wood. Also caissons, construction involving shore protection, ship building facilities, harbor and river improvements and borings for soil investigation.*

RAYMOND CONCRETE PILE COMPANY

140 CEDAR STREET • NEW YORK, N. Y. *Branch Offices in Principal Cities*

EVERY TON SAVED IS A TON GAINED



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